

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, SOUTHERN ZONE
BENCH AT CHENNAI**

Appeal No. 60 of 2024

BETWEEN:

Minering Aggregates Private Limited

... Appellant

Versus

State Environment Impact Assessment Authority (SEIAA)

... Respondent

**ANNEXURES FILED ALONG WITH REJOINDER STATEMENT ON BEHALF OF
THE APPELLANT**

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Dated at Chennai on this the 12th day of June, 2025.



COUNSEL FOR APPELLANT

MINUTES OF THE 143RD MEETING OF THE SEAC, KERALA HELD FROM 25TH to 26TH MAY 2023 IN VIRTUAL MODE

The meeting started at 10.00 AM on 25th May 2023. Dr. R. Ajayakumar Varma, Chairman, SEAC Kerala chaired the meeting. The Committee discussed the agenda items in detail and took the following decisions:

143.01 Noting of minutes of the 142nd SEAC meeting held on 11th to 12th May 2023.

Decision: Confirmed.

143.02 Common Judgment dated 11.12.2019 in WP (C) No.5589/2019, WP (C) No.9656/19 and WP (C) No.25439/2019 filed by Sri. Unnikrishnan. K P and the President, Vaniyamkulam Grama Panchayat against M/s JMC Granites, Palakkad-Constitution of Joint Committee for monitoring the status of compliance (File No.4429/A2/2019/SEIAA)

Decision: The Joint Committee constituted by the SEIAA with Dr. K. Vasudevan Pillai as the nominee of SEIAA conducted several site visits & monitored the experimental blast conducted by experts from NIT, Surathkal. The Committee concluded from the results that, if the blast is carried out observing specific protocols as suggested by NIT, it will not lead to the development of cracks on built structures located beyond 100m. The experimental study has been carried out in the presence of all the members of the expert committee constituted by SEIAA and in the presence of the complainants and LSGD authorities. The detailed report of the subcommittee is submitted to the SEIAA. The Authority may consider the request of the complainants to hear them as mentioned in the report of the Joint Committee.

143.03 Environmental Clearance for the granite building stone quarry project of Sri. A M.Muhammed Ali, M/s. Mubaraq Granites at Sy. No. 93/1 pt, 94 pt, 95 pt, 96 pt of Perakamanna Village, Ernad Taluk, Malappuram – Request for revalidation (File No.902/SEIAA/EC1/3463/2015)

Decision: The Committee discussed the evaluation report and noticed the following:

1. The EC No. 902/SEIAA/EC1/3463/2015 dated 23.2.2017 with a validity of 5 years was issued for an area of 4.8157 Ha based on a Mining Plan approved on 3.8.2015 in which the life of mine was 4 years, the mineable reserve was 11.4 Lakh MT and production plan was 3,00,000 TPA.

2. The Proponent got a Mining Plan approved on 26.4.2017 after he got the EC on 23.2.2017 in which the life of mine was 10 years, mineable reserve was 20 Lakh MT and production plan was 2 lakh TPA.
3. Vide Judgement dated 20.12.2022, the Hon. Court ordered that the EC shall commence only from the date of commencement of Mining Permit. The Hon. Court also directed the SEIAA to extend the benefit of the Notification SO No.1807 (E) dated 12.4.2022 to the Project proponent.

Based on the points above, the Committee took the following decisions:

1. Seek clarification from the SEIAA whether the revalidation application can be considered in this case as the EC is not issued based on the Mining Plan which is submitted before the Hon. Court.
2. Considering the application for extension/expansion, the Proponent is directed to apply through Parivesh with adequate documents, which include a Scheme of Mining, a Certified Compliance Report, Certified Survey Map indicating all the built structures, including residential and other buildings, PFR prepared based on the DSR, Revised EMP and recent Cluster Certificate after obtaining concurrence from the SEIAA.
3. Bring to the notice of the SEIAA that the Standing Council's opposition to filing an appeal was only against the SO 1807 (E) dated 12.04.2022 by the MoEF&CC. But in this case, the order of the court is to extend the EC validity to 10 years as per a mining plan prepared after the issuance of the EC. The EC was not issued based on this mining plan.

PART 1

1. **SIA/KL/INFRA/416126/2023, 2223/EC1/2023/SEIAA
Environmental Clearance for the proposed Residential project developed by M/s Oceanus Dwellings Pvt. Ltd. at Survey Nos. 578/19, 578/21, 580/8, 581/7, 581/8, 581/9 in Palakkad II Village, Palakkad Taluk, Palakkad (Fresh application)**

Decision: The Committee examined the proposal, verified the documents submitted by the project proponent and observed that the proposed plot area is 0.7892 ha, and the total built-up area is 36,121.76 sqm. The proposed area 4.3 km away from the Medium Hazard zone. The project cost is 76 Crores. The committee noted that the CER is not submitted and the EMP and its budgetary provisions are not satisfactory. **The Committee decided to invite the project proponent for presentation.**

2. **SIA/KL/MIN/129967/2019, 1861(A)/EC4/2019/SEIAA
Environmental Clearance for the Proposed Granite Building Stone Quarry f of Sri.Ramakrishnan. C, or an extent of 0.9800 Ha, at Un Surveyed number in Thiruvambady Village, Thamarassery Taluk, Kozhikode, Kerala. ADS Received)**

Decision: The committee verified the documents submitted by the proponent and found them satisfactory. A house is located at 102m. However, the report on the landslide susceptibility study needs detailed evaluation; hence the Committee decided to entrust the task to Dr. A N Manoharan. **Based on the discussion, the Committee decided to invite the proponent for presentation.**

3. SIA/KL/MIN/132322/2019, 1635/EC1/2020/SEIAA

Granite Building Stone Quarry of Shri. Nino K Thomas over an extent of 2.7213 Ha. (6.7243 Acres) at Re-Survey Block No. 31, Re-survey. Nos. 457/1, 457/2, 457/3, 457/4, 457/4-1, 457/5, 457/6 & 457/7, in Vadasserikkara Village, Ranni Taluk, Pathanamthitta, Kerala (FIR Received)

Decision: The Committee verified the proposal and observed that the total mineable reserve is 9,62,238.75 and the mine life is 6 years. The Periyar Tiger Reserve is at 13.38km from the proposed area. The presentation was done in the 117th SEAC meeting. When the presentation got over, SEAC examined a complaint received from Smt. Gracy Thomas, Smt. Manju Ann Thomas and Shri. Manoj Thomas against the quarry. The allegation was that some portions of the proposed access road were passing through the complainant's land for which they had not consented. As per the decisions of the SEAC a field inspection was conducted on 20.01.2021. The subcommittee also visited the complainants at their residence and heard their grievances. It was found that the allegation was correct and that the proposed access road passes through their land for which the proponent had not sought any consent. This was communicated to the proponent, who submitted a plan for relocated haulage road.

In the 134th SEAC meeting, the Committee recommended delisting the proposal since the site is falling in the ESA Village. Following the decision of the 123rd SEIAA regarding the ESA Villages, the Project Proponent was asked to submit a certificate from a revenue official not below the rank of Tahsildar with duly signed cadastral level map published in the website of KSBB demarcating the ESA and non-ESA areas in the village. The committee also wanted the certificate to include the nature of the land, the nature of possession and a report on natural hazards like landslides, if any.

Considering the need to examine the proposal for relocation of the haulage road and that the land fragility of the site is very high, the committee decided to conduct a field inspection. The committee discussed the field inspection report conducted on 06.05.2023 and observed that there are two quarries with a common boundary point. Earlier SEAC asked for a comprehensive EMP as per the Judgment dated February 27, 2012, in Deepak Kumar Vs the State of Haryana. This is not communicated as per the documents uploaded. There is also another closed quarry nearby. The topsoil removed during the inception of that project is kept

on the newly proposed land. This can be utilised to rehabilitate the closed quarry. **Based on discussions, the committee decided to direct the proponent to submit the following additional documents:**

1. A comprehensive EMP considering both the quarries of Nino K Thomas as well as the environmental issues, if any, due to the non-working quarries in the vicinity.
2. Detailed plan for compensatory afforestation consisting of the geo-coordinates of the demarcated area for compensatory afforestation, geo-tagged photographs of the location, ownership details and number, type and species of trees, shrubs, herbs and climbers included in the afforestation program.
3. A certificate from a revenue official not below the rank of Tahsildar with duly signed cadastral level map published in the website of KSBB demarcating the ESA and non-ESA areas in the village. Certificate from the Tahasildar to include the nature of land, nature of possession and a report on natural hazards like landslides, etc., if any.

The Committee also noted that the restrictions of moderate hazard zone is applicable in this case.

4. SIA/KL/MIN/132766/2019, 1718/EC6/2020/SEIAA

Environmental Clearance for the Granite Building Stone Quarry of Sri.M.Kunhi Muhammed for an area of 0.6301 Ha. at Re- survey no. 337/1 in Morayur village, Kondotty Taluk, Malappuram. (ADS Received)

Decision: The Committee verified the documents submitted by the project proponent and found them satisfactory except for fixing of boundary pillars and EMP. Based on discussions, **the Committee decided to direct the project proponent to submit a revised EMP excluding the cost of the items to be included in the Project Cost and including CER cost and also revised Project cost incorporating all items required for establishing and operating the project.**

5. SIA/KL/MIN/137919/2020, 2059/EC3/2022/SEIAA

Application for the Granite Building Stone Quarry of Shri. Baiju Joseph” over an extent of 0.9307 Ha. (2.2997 Acres) at Sy Nos. 463/5-4, 468/3-1 & 468/4-1, Thirumarady Village, Muvattupuzha Taluk, Ernakulam, Kerala – (Field Inspection Report received)

Decision: The Committee examined the proposal and noted that the mineable resource is 254200MT (Average annual production 49,640 TPA) and the mine life is 6 years. The committee discussed the field inspection report conducted on 07.05.2023 and noted that there are some typographical errors in the report which have been explained during the meeting. The distance to the nearest house is 65m from the boundary. The presentation was done by the proponent in 138th SEAC meeting. Based on discussions, **the Committee decided to**

recommend EC for a mine life of 6 years subject to the following Specific Conditions in addition to the General Conditions:

1. Compensatory afforestation shall be completed within the first two years and geotagged photographs shall be incorporated with the HYCR
2. The stream passing through the old quarry site shall be rerouted to its original path so that it won't mix up with the SST and RWP which is planned in the pit of the old quarry. The geotagged photographs shall be included in the first HYCR
3. A culvert shall be constructed where the road to the quarry crosses the stream
4. Temporary wall connecting BP1, BP2 & BP3 to avoid nuisance to habitation near by.
5. Measures shall be adopted to safeguard the abandoned quarries in the site and submit report with HYCR.
6. Development of green belt using indigenous species should be initiated prior to the commencement of mining.
7. The impact of vibration due to blasting on the houses and built structures within 200m should be monitored in terms of Peak Particle Velocity and amplitude for maximum charge per delay and included in the Half Yearly Compliance Report.
8. Drainage system incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining.
9. Overflow water from the siltation pond should be discharged to the nearby natural drain after adequate filtration.
10. Garland drain, silt-traps, siltation ponds and outflow channel should be desilted periodically and geo-tagged photographs of the process should be included in the half yearly compliance report (HYCR).
11. Drainage water should be monitored at different seasons by an NABL accredited lab and clear water should only be discharged into the natural stream. Geotagged photographs of the drainage and sampling site should be submitted along with HYCR.
12. Overburden should be stored at the designed place and gabbion wall should be provided for the topsoil and overburden storage sites
13. CER Plan should be implemented within the first 2 years and it should be operated and maintained till the mine closure plan is implemented.
14. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).
15. Adequate sanitation, waste management and rest room facilities should be provided to the workers.
16. Adequate energy conservation measures should be implemented including solar power installations. At least 40% of the energy requirement shall be met from the solar power
17. Environment Management Cell (EMC) should include one subject expert in environment management. The proceedings of the monthly meeting of the EMC should be submitted along with the HYCR.

18. Adequate number of avenue trees of indigenous species should be planted along both sides of the haulage road.

6. SIA/KL/MIN/141622/2020 , 1916/EC2/SEIAA/2021

Granite Building Stone Quarry of Sri. K V Joy over an extent of 1.4062 Ha. (3.4747 Acres) at Re- Sy. Block No. 19, Re-Sy. Nos. 8/33, 8/34, Kalpetta Village, Vythiri Taluk, Wayanad, Kerala – (ADS Received)

Decision: The Committee observed that the proposal is to extract granite building stone and the total mineable reserve is 895825 MT with production plan of 65295 TPA and mine life of 10 years. The nearest house is at 157 m from the boundary of the site and depth to watertable is 15 m below ground level. The presentation was done in 136th SEAC meeting and subsequently the field inspection was carried out. The site is located on the north-western side slopes of Manikkunnu Mala, a residual hill of length about 6 km and width about 5 km almost at its fag end. It is a rugged mountainous landscape and an ecologically fragile mountain system, surrounded with densely populated human habitations and agriculture land uses and is of significant ecological importance. **Based on discussions, the Committee decided to defer the proposal to the next meeting for a detailed discussion on various aspects of the project.**

7. SIA/KL/MIN/143579/2020, 1831/EC1/2020/SEIAA

Proposed Granite (Building Stone) Quarry of Shri. Muhammed Abdul Basheer in Sy. No. 5/7, 6/1B1 of Pattithara Village, Pattambi Taluk of Palakkad District., Kerala (FIR Received)

Decision: The committee discussed the field inspection report and noted that the proposed area of the project is 0.3171 Ha, the mineable reserve is 38865 MT, annual production is 12955 MTA and the mine life is 3 years. The depth to water table is 4 m bgl. The source of water is open well & abandoned quarry pit. The highest and lowest elevation is 50m and 25m respectively. The committee observed the following:

1. An abandoned quarry is situated in the project site. So planting in buffer area is very difficult. So Compensatory afforestation is needed.
2. A crusher unit owned by the proponent is situated at a distance of 101.74 m

The Committee decided to get the following additional documents.

1. Detailed plan for compensatory afforestation consisting of the geo-coordinates of the demarcated area for compensatory afforestation, geo-tagged photographs of the location, number of trees proposed and the type and species of trees, shrubs, herbs and climbers included in the afforestation program.
2. Photographs of the demolition of the building and demolished site as the Proponent agreed to demolish the nearest building within 50 m during site inspection

- 8. SIA/KL/MIN/209584/2021, 1903/EC3/2021/SEIAA
Environmental Clearance for the proposed Granite Building Stone Quarry over an extent of 3.6153 Hectares in Survey No. 231 part (Govt. Land) at Konnathady Village of Idukki Taluk, Idukki District, Kerala. (ADS Received)**

Decision: The committee verified the documents submitted by the proponent and **decided to entrust Dr. Mahesh Mohan and Dr. K N Krishnakumar for field inspection and report.**

- 9. SIA/KL/MIN/235350/2021, 2061/EC3/2022/SEIAA
Environmental Clearance for the Mining of Laterite Building Stone project of Babu Joseph, Keezeth, Edakkattuvayal, at Re-Survey No.33/10 Edakkattuvayal Village, Kanayannoor Taluk, Ernakulam District, Kerala (ADS Received)**

Decision: The committee verified the documents submitted by the proponent and found them satisfactory. The committee noted a small built structure on the northern part at around 35m. The geological reserve is 71462MT and mineable reserve is 51390 MT. The mine life is 2 years. The elevation difference is 36MSL to 30 MSL. Depth to water table is 9m at 27m MSL. Based on discussions, **the Committee decided to recommend EC for the life of mine of two year subject to the following specific conditions in addition to general conditions:**

1. The mining should be done by maintain a buffer of 50m between the project area and built structure.
2. The excavation activity associated should not involve blasting.
3. The excavation activity should be restricted to 2m above the groundwater table at the site.
4. The excavation activity should not alter the natural drainage pattern of the area
5. The excavated pit should be restored by the project proponent for useful purpose
6. Appropriate fencing all around the excavated pit should be made to prevent any mishap
7. Measures should be taken to prevent dust emission by covering of excavated earth during transportation
8. Safeguards should be adopted against health risks on account of breeding of vectors in the water bodies created due to excavation of earth
9. Workers/labourers should be provided with facilities for drinking water and sanitation
10. A berm should be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation
11. A minimum distance of 50m from any civil structure should be kept from the periphery of the project area
12. No water logging should be allowed in the mine pit. Appropriate drainage should be ensured from the project area prior to the commencement of mining.
13. The drain should be provided with silt traps and siltation pond and the overflow water should be clarified and drained to the nearest natural drain without any hindrance.

14. The drainage system should be cleaned and desilted periodically to facilitate unhindered drainage.
15. Measures incorporated in the CER should be implemented as per norms
16. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).

10. SIA/KL/MIN/272893/2022, 2087/EC3/2022/SEIAA

Environmental Clearance for the Mining of building Stone Quarry (Minor Mineral) project of Mr. M. G. Babu is situated at Survey Nos. 725/1, 725/2-2, 725/2-3, 725/2, 725/2, in Kallorkad Village, Muvattupuzha Taluk, Ernakulam, Kerala in an area of 0.9105 hectares. (FIR Received)

Decision: The committee discussed the field inspection report and observed that the mineable reserve is 138603MT and annual production is 27720.6 MTA. The mine life is 5 years. The source of water is an old quarry pit. The nearest habitation is 102.7m. The nearest built structure is at 80m. The site does not fall in any landslide hazard zone. The committee noted that the buildings within 50m are demolished. The source of water is nearby old pit owned by the proponent. Based on discussions, **the committee decided to direct the proponent to submit the following additional documents:**

1. Geotagged photographs as proof of the demolished building within 50m. of the boundary of proposed area.
2. Modified CER by incorporating monitorable physical targets identified based on stakeholder consultation and a detailed implementation plan
3. New cluster certificate
4. Energy conservation plan.

11. SIA/KL/MIN/274693/2022 , 2055/EC1/2022/SEIAA

Granite Building Stone Quarry of M/S J&P Constructions over an extent of 1.8741 Ha. Survey Nos. 322, 323/1, 323/2 in Ongallur- I Village, Pattambi Taluk, Palakkad District, Kerala (ADS Received)

Decision: The Committee examined the proposal and noted that the mineable resource is 839806 MT (Average annual production 69984 MTA) and the mine life is 12 years. The depth to water table is reported as 4 m bgl. The nearest habitation is at 103 m from BP 1. The project was presented before the committee and the field inspection report discussed by the committee. Based on discussions, **the Committee decided to recommend EC for a mine life of 12 years subject to the following Specific Conditions in addition to the General Conditions:**

- 1) An abandoned quarry is found adjacent to the proposed project area. This land is understood to be owned by the proponent. This abandoned quarry should be protected

with fencing to avoid danger to humans and animals and rehabilitated as water storage or for cultivation prior to the commencement of mining.

- 2) Drainage system incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining. Overflow water from the siltation pond should be discharged to the nearby natural drain after adequate filtration
- 3) Garland drain, silt-traps, siltation ponds and outflow channel should be desilted periodically and geo-tagged photographs of the process should be included in the half-yearly compliance report (HYCR).
- 4) Drainage water should be monitored at different seasons by an NABL-accredited lab and clear water should only be discharged into the natural stream. Geotagged photographs of the drainage and sampling site should be submitted along with HYCR.
- 5) Development of green belt should be initiated prior to the commencement of mining operation
- 6) CER proposed should be implemented during the first two years and it should be operated and maintained during the rest of the project period till the closure plan is implemented.
- 7) The impact of vibration due to blasting on the houses and built structures within 500m should be monitored in terms of Peak Particle Velocity and amplitude for maximum charge per delay prior to the commencement of mining to ensure that there is no impact and the result should be displayed in front of the project entry gate.
- 8) The impact of vibration due to blasting on the houses and built structures within 500m should be monitored in terms of Peak Particle Velocity and amplitude for maximum charge per delay should be monitored and the result included in the Half Yearly Compliance Report.
- 9) Overburden should be stored at the designed place and gabion wall should be provided for the topsoil and overburden storage sites
- 10) CER Plan should be implemented within the first 2 years and it should be operated and maintained till the mine closure plan is implemented.
- 11) Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).
- 12) Adequate sanitation, waste management and rest room facilities should be provided to the workers.
- 13) Adequate energy conservation measures should be implemented including solar power installations. At least 40% of the energy requirement shall be met from the solar power
- 14) Environment Management Cell (EMC) should include one subject expert in environment management. The proceedings of the monthly meeting of the EMC should be submitted along with the HYCR.
- 15) Adequate number of avenue trees of indigenous species should be planted along both sides of the haulage road.

12. SIA/KL/MIN/275159/2022 , 2073/EC1/2022/SEIAA

Environment Clearance for mining permit of "M/s K L R Granites" over an extent of 3.8717 Ha at ReSy Block No.:20, Re-Sy No.: 47/1-9, Malayalappuzha Village, Konni Taluk, Pathanamthitta District, Kerala (FIR Received)

Decision: The committee discussed the field inspection report and noted that the mineable reserve is 2034517.50 MT and annual production is 3,49,920.23 TPA. The mine life is 7 years. The depth to water table is 10m and the source of water is an open well. The highest and lowest elevation is 115m and 145m, respectively. The nearest habitation is at 201m. One first order stream is passing on one side of the site (BP8 – BP6). A large number of trees are to be removed including rubber as per the biodiversity report. A total of 845 trees have to be cut down for the project (148 local trees and 697 rubber). **Based on discussions, committee decided to direct the proponent to submit the following additional documents:**

1. Detailed plan for compensatory afforestation consisting of the geo-coordinates of the demarcated area for compensatory afforestation, geo-tagged photographs of the location, ownership details of the proposed land and species of trees, shrubs, herbs and climbers included in the afforestation program. A minimum of 2300 plants has to be planted
2. The Project Proponent shall carry out vibration studies and submit the details as per OM dated 29.10.2014 to evaluate the zone of influence and impact of blasting on the neighbourhood.
3. Details of energy conservation measures
4. Protection measures for the seasonal stream
5. Drainage map with details of siltation pond and silt trap

13. SIA/KL/MIN/279609/2022 , 2119/EC2/2022/SEIAA

Environmental Clearance for Laterite building stone quarry of Mr Pratheep K. C over an extent of 0.0971 Ha, Survey No- 628/1A1pt12 in Munnad Village, Kasargod Taluk, Kasargod District, Kerala (ADS Received)

Decision: The Committee examined the proposal and scrutinized the additional details submitted. The project was presented before the committee. The total mineable reserve is 4300 Metric Ton and life of mine is 1 year. The depth to water table is reported as 6 m below ground level measured in a well at a distance of 98m. **Based on discussions, the Committee decided to recommend EC for the life of mine of one year subject to the following specific conditions in addition to general conditions:**

1. The excavation activity associated should not involve blasting.
2. The excavation activity should be restricted to 2m above the groundwater table at the site.
3. The excavation activity should not alter the natural drainage pattern of the area
4. The excavated pit should be restored by the project proponent for useful purpose

5. Appropriate fencing all around the excavated pit should be made to prevent any mishap
6. Measures should be taken to prevent dust emission by covering of excavated earth during transportation
7. Safeguards should be adopted against health risks on account of breeding of vectors in the water bodies created due to excavation of earth
8. Workers/labourers should be provided with facilities for drinking water and sanitation
9. A berm should be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation
10. A minimum distance of 50m from any civil structure should be kept from the periphery of the project area
11. No water logging should be allowed in the mine pit. Appropriate drainage should be ensured from the project area prior to the commencement of mining.
12. The drain should be provided with silt traps and siltation pond and the overflow water should be clarified and drained to the nearest natural drain without any hindrance.
13. The drainage system should be cleaned and desilted periodically to facilitate unhindered drainage.
14. Measures incorporated in the CER should be implemented as per norms
15. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).

14. SIA/KL/MIN/280486/2022, 2135/EC2/2022/SEIAA

Environmental Clearance for the proposed Granite (Building Stone) Quarry in Block No. 26, Re-Survey Nos: 152/5pt, 152/6pt & 155/12pt of Valakom Village, Kottarakkara Taluk, Kollam District, Kerala of N Asokan (ADS Received)

Decision: The committee examined the documents submitted by the proponent and found that the site proposed for compensatory afforestation is seems to be not suitable. The abandoned quarry adjacent to the site is not safeguarded. Therefore committee decided to direct the proponent to submit the following additional documents:

1. Compensatory afforestation plan along with coordinates of the proposed site, geotagged photographs of the site, ownership details of the site
2. Safeguard measures and plan for utilization of the abandoned quarry
3. There are many quarries adjacent to the proposed site hence comprehensive EMP as per OM dated 18.05.2023 of MoEF&CC needs to be submitted in accordance with the guidelines.

15. SIA/KL/MIN/280530/2022, 2088/EC3/2022/SEIAA

Environment Clearance for mining permit of Granite Building Stone Quarry of "Sri. Tom George" over an extent of 2.0508 Ha at Sy No.: 80/5/B, 80/6 & 82/2/B, Palakuzha Village, Muvattupuzha Taluk, Ernakulam, Kerala (ADS Received)

Decision: The committee verified the documents submitted by the proponent and found them satisfactory. The total Mineable reserve is 7,21,034.57 MT (1,49,858.94 TPA) and Mine life is 8 years. The depth to watertable is 9.68 m below ground level and the nearest house is at 63m. The presentation was done on 136th meeting and field inspection conducted on 08.03.2023. **Based on discussions, the Committee decided to recommend EC for a mine life of 8 years subject to the following Specific Conditions in addition to the General Conditions:**

1. A buffer distance of 50m should be erected between the boundary of the crusher and the boundary of the proposed mine
2. A temporary wall of height 5m should be provided between BP2, BP3, BP4, BP5 & BP6.
3. Development of green belt using indigenous species should be initiated prior to the commencement of mining.
4. The impact of vibration due to blasting on the houses and built structures within 200m should be monitored in terms of Peak Particle Velocity and amplitude for maximum charge per delay and included in the Half Yearly Compliance Report.
5. Drainage system incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining.
6. Overflow water from the siltation pond should be discharged to the nearby natural drain after adequate filtration
7. Garland drain, silt-traps, siltation ponds and outflow channel should be desilted periodically and geo-tagged photographs of the process should be included in the half yearly compliance report (HYCR).
8. Drainage water should be monitored at different seasons by an NABL accredited lab and clear water should only be discharged into the natural stream. Geotagged photographs of the drainage and sampling site should be submitted along with HYCR.
9. Overburden should be stored at the designed place and gabion wall should be provided for the topsoil and overburden storage sites
10. CER Plan should be implemented within the first 2 years and it should be operated and maintained till the mine closure plan is implemented.
11. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).
12. Adequate sanitation, waste management and rest room facilities should be provided to the workers.
13. Adequate energy conservation measures should be implemented, including solar power installations. At least 40% of the energy requirement shall be met from the solar power
14. Environment Management Cell (EMC) should include one subject expert in environment management. The proceedings of the monthly meeting of the EMC should be submitted along with the HYCR.
15. Adequate number of avenue trees of indigenous species should be planted along both sides of the haulage road

16. SIA/KL/MIN/284456/2022, 2108/EC4/2022/SEIAA

Environmental Clearance for Laterite building stone quarry of Mr. Cherunni. K, over an extent of 0.5827 Ha, Re. SyNo-32/2D, in Kakkad Village, Kozhikode Taluk, Kozhikode, Kerala. (ADS Received)

Decision: The committee verified the documents submitted by the proponent and found them satisfactory except the EMP which does not include CER. Therefore committee decided to direct the proponent to submit the following:

1. CER as per norms
2. EMP incorporating spot specific mitigation plan and CER
3. Explanation for contradiction in the data provided on the water requirement.

17. SIA/KL/MIN/290613/2022, 2128/EC1/2022/SEIAA

Environment Clearance for the Proposed Granite Building Stone Quarry of M/s Johnson Rocks for an extent of 0.8949 Hectares at Sy. No. 138/4 (Pt) & 140/4 (Pt), Patta Land in Iravon Village, Konni Taluk, Pathanamthitta (FIR Received)

Decision: The committee discussed the field inspection report conducted on 06.05.2023 and observed the following:

1. Panchayath road is 50.3 m away from the BP 11 and is passing parallel to the southern boundary of the project site for a total distance of 190m.
2. The outflow water from the siltation pond will directly reach to the Panchayath road
3. The proposed siltation pond and silt traps are on the steep side and will not get enough settling time and depth for properly settling the drain water. Also may require concrete structures for the siltation tanks and silt traps, otherwise the ponds may prove disastrous during high intensity rainfall.
4. No proper OB dump plan given
5. The area shown for the afforestation program is unsuitable as it is a rocky terrain. Hence an alternate area for compensatory afforestation along with the geo-coordinates of the demarcated area for compensatory afforestation, geo-tagged photographs of the location, ownership details and number and the type and species of trees, shrubs, herbs and climbers included in the afforestation program.
6. Nearby quarry is owned by the same proponent and is not followed scientific mining

Further, the Committee also observed that the environmental quality data is more than 4 years old. **Based on detailed discussions, the Committee decided to recommend rejection of the proposal invoking precautionary principles and based on the following grounds.**

1. The southern portion of the site is very steep where a Panchayath road is located which will be affected due to the outflow discharges, accidental spillages and breaches, if any from the quarry from the quarry.
2. The higher steepness of the southern portion of the proposed site does not provide feasibility to construct a drainage channel with suitable siltation ponds and silt traps.
3. The built-structures located in the southern portion of the proposed site, having significant downward slope, will always be on threat of accidental spillages or breaches from the quarry.
4. The proposed site requires precaution to preserve the natural equilibrium around the areas which is likely to get altered due to the proposed operations.

18. SIA/KL/MIN/401155/2022 , 2123/EC1/2022/SEIAA

Granite Building stone over an extent of 2.1449 Ha in Block No. 35, Re-Survey Nos. 352/7, 353/1, 353/2, 353/2-1, 353/3, 353/4, 353/8, 353/9, & 354/2 in situated in Nedumangad Village, Nedumangad Taluk, Thiruvananthapuram District, Kerala (ADS Received)

Decision: The committee verified the documents submitted by the proponent and found them satisfactory except the CER proposal and root plan. **Based on discussions, the committee decided to direct the proponent to submit the following additional documents:**

1. Revised CER strictly in accordance with monitorable physical targets and based on Stakeholders consultation.
2. Detailed plan of road with engineering drawing and geotagged photographs of the proposed route.
3. Copy of the permit and environmental clearance order based on which the mining was carried out in the portion of the site.
4. Results of vibration studies conducted as per OM dated 29.10.2014 to evaluate the zone of influence and impact of blasting on the neighbourhood.

19. SIA/KL/MIN/406956/2022 , 2155/EC1/2022/SEIAA

Environmental Clearance for Laterite building stone quarry of Mr. Muhammed, over an extent of 0.0809 Ha, Survey No. 385/3 in Kappur Village, Pattambi Taluk, Palakkad District, Kerala (ADS Received)

Decision: The Committee examined the proposal and noted that the the total reserve is 12135MT and the recoverable quantity is 8494.5 MTA with life of mine of 1 year. The elevation difference of the site is 50m to 53m above MSL and the nearest house is at 62 m north. The Project cost is 15 lakhs. **Based on discussions, the Committee decided to recommend EC for the life of mine of one year subject to the following specific conditions in addition to general conditions:**

1. The excavation activity associated should not involve blasting.
2. The excavation activity should be restricted to 2m above the groundwater table at the site.
3. The excavation activity should not alter the natural drainage pattern of the area
4. The excavated pit should be restored by the project proponent for useful purpose
5. Appropriate fencing all around the excavated pit should be made to prevent any mishap
6. Measures should be taken to prevent dust emission by covering excavated earth during transportation
7. Safeguards should be adopted against health risks on account of breeding of vectors in the water bodies created due to excavation of earth
8. Workers/labourers should be provided with facilities for drinking water and sanitation
9. A berm should be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation
10. A minimum distance of 50m from any civil structure should be kept from the periphery of the project area
11. No water logging should be allowed in the mine pit. Appropriate drainage should be ensured from the project area prior to the commencement of mining.
12. The drain should be provided with silt traps and siltation pond and the overflow water should be clarified and drained to the nearest natural drain without any hindrance.
13. The drainage system should be cleaned and desilted periodically to facilitate unhindered drainage.
14. Measures incorporated in the CER should be implemented as per norms
15. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).

20. SIA/KL/MIN/40868/2019 , 1447/EC2/2019/SEIAA

Environmental Clearance for the Granite Building Stone Quarry of Sri.K.M.Salim for an area of 0.3840 Ha. at Re.Sy.No. 178/4, 178/5, 178/6, 178/7 and 178/8 in Killimangalam Village, Thalappilly Taluk, Thrissur (ADS Received)

Decision: The committee verified the documents submitted by the proponent and noted that the site is outside the proposed ESZ as per the letter of Wildlife Warden. The mining is proposed along a gentle slope. Since the area is small, the mining should be limited to 85m above MSL or 10m below the ground level (restricting to 2 benches only). **Based on the discussion the committee decided to recommend EC for 2 years, subject to the following specific conditions in addition to the general conditions:**

1. The mining should be limited to 85m above MSL or 10m below ground level (maximum of two benches only)
2. Development of green belt using indigenous species should be initiated prior to the commencement of mining.

3. Drainage system incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining.
4. Overflow water from the siltation pond should be discharged to the nearby natural drain after adequate filtration
5. Garland drain, silt-traps, siltation ponds and outflow channel should be desilted periodically and geo-tagged photographs of the process should be included in the half yearly compliance report (HYCR).
6. Drainage water should be monitored at different seasons by an NABL accredited lab and clear water should only be discharged into the natural stream. Geotagged photographs of the drainage and sampling site should be submitted along with HYCR.
7. Overburden should be stored at the designed place and gabbion wall should be provided for the topsoil and overburden storage sites
8. CER Plan should be implemented within the first 2 years and it should be operated and maintained till the mine closure plan is implemented.
9. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).
10. Adequate sanitation, waste management and rest room facilities should be provided to the workers.
11. Adequate energy conservation measures should be implemented including solar power installations
12. Environment Management Cell (EMC) should include one subject expert in environment management. The proceedings of the monthly meeting of the EMC should be submitted along with the HYCR.
13. Adequate number of avenue trees of indigenous species should be planted along both sides of the haulage road.

21. SIA/KL/MIN/411438/2022, 2189/EC1/2023/SEIAA

Granite Building Stone Quarry of Sri. K Anil Kumar for an extent of 1.2210 Ha in Block No. 32, Re-Survey Nos: 188/1pt (government land), 188/3 (private land) of Koodal Village, Konni Taluk, Pathanamthitta District, Kerala (FIR Received)

Decision: The committee discussed the field inspection report conducted on 06.05.2023 and observed that the traffic is high as there are many quarries in the nearby areas. The green belt development in the buffer zone is not feasible in all around the buffer zone due to exposed hard rocks. The committee noted the requirement of the following additional details:

1. Drainage map showing connection to natural drain with silt traps and siltation ponds and
2. OB dump plan
3. Plan for Road development

4. Traffic study based transportation management plan and mitigation measures traffic related issues
5. Details of provisions for Rain water harvesting
6. Details of energy conservation measures
7. Results of vibration studies conducted as per OM dated 29.10.2014 to evaluate the zone of influence and impact of blasting on the neighbourhood.
8. Detailed plan for compensatory afforestation consisting of the geo-coordinates of the demarcated area for compensatory afforestation, geo-tagged photographs of the location, ownership details and number, type and species of trees, shrubs, herbs and climbers included in the afforestation program.
9. Details of top soil and management of top soil
10. Details of source of water, safe yield of the source and sustainability characteristics of the source

Based on discussions, the committee decided to invite the proponent for presentation.

22. SIA/KL/MIN/416051/2023, 2219/EC3/2023/SEIAA

Environmental Clearance for the Mining of Granite Building Stone Quarry of Sri. A. H. Sheriff Survey Nos. 1087/1A2 at Mulavoor Village, Muvattupuzha Taluk, Ernakulam District, Kerala (FIR Received)

Decision: The committee discussed the field inspection report conducted on 20.05.2023 and observed the mineable reserve is 200280MT and annual production is 40056MTA. The mine life is 5 years. The depth to watertable is 8bgl at 37msl and the source of water is the Old quarry pit. The highest and lowest elevation is 55m & 75m respectively. The nearest house is at 121m. The highest hazard zone is 1.5km from the proposed site. The committee found that the proposed site is a part of an old quarry. A Crusher unit is within 5m from BP1, and a Workshop building is within 15m from BP2. There is a necessity to limit the depth of mining above 45m MSL. The Committee observed that the following additional details are required for further processing of the proposal.

1. Copy of the permit and environmental clearance order based on which the mining was carried out in the portion of the site.
2. Results of vibration studies conducted as per OM dated 29.10.2014 to evaluate the zone of influence and impact of blasting on the neighbourhood.
3. Detailed plan for compensatory afforestation consisting of the geo-coordinates of the demarcated area for compensatory afforestation, geo-tagged photographs of the location, ownership details and number, type and species of trees, shrubs, herbs and climbers included in the afforestation program.
4. Plan for sanitation and waste management and energy conservation measures including the use of solar power

The committee decided to invite the proponent for a presentation.

23. SIA/KL/MIN/44488/2019, 1474/EC1/2019/SEIAA

Granite Building Stone Quarry of Sri. Nino K Thomas at Re-Survey Block No. 31, Re-survey. Nos. 394/2, 461/1 & 461/4, Vadasserikkara Village, Ranni Taluk, Pathanamthitta District, Kerala (FIR Received)

Decision: The proposed area is 2.0832 Ha, the total mineable reserve is 489,563.75 MT (1,15,353.75 MTA) and mine life is 7 years. Presentation was done in the 117th SEAC meeting.

When the presentation got over, SEAC examined a complaint received from Smt. Gracy Thomas, Smt. Manju Ann Thomas and Shri. Manoj Thomas against the quarry. The allegation was that some portions of the proposed access road was passing through the complainant's land for which they had not given any consent. As per the decisions of the SEAC a field inspection was conducted on 20.01.2021. The subcommittee also visited the complainants at their residence and heard their grievances. It was found that the allegation was correct that proposed access road passes through their land for which the proponent had not sought any consent. This was communicated to the proponent and the proponent submitted a plan for relocated haulage road.

In the 134th SEAC meeting held on 09th to 11th November, 2022, the Committee recommended delisting the proposal since the site is falling in the ESA Village. Following the decision of 123rd the SEIAA regarding the ESA Villages, the Project Proponent was asked to submit a certificate from a revenue official not below the rank of Tahsildar with duly signed cadastral level map published in the website of KSBB demarcating the ESA and non-ESA areas in the village. The committee also wanted the certificate to include the nature of land, nature of possession and a report on natural hazards like landslides, etc., if any.

Considering that the haulage road is relocated and the land fragility of the site is very high, the committee decided to conduct a field inspection. The committee discussed the field inspection report conducted on 06.05.2023 and observed that there are two quarries with a common boundary point. Earlier SEAC has asked for a comprehensive EMP as per the Judgment dated February 27, 2012, in Deepak Kumar Vs the State of Haryana. This is not communicated as per the documents uploaded. There is an expired quarry nearby with proper benches. The topsoil removed during the inception of that project is kept on the newly proposed land. This can be utilised to rehabilitate the expired quarry. The restrictions of moderate hazard zone is applicable in this case. **Based on that committee decided to direct the proponent to submit the following additional documents:**

1. A comprehensive EMP for both the quarries of Nino K Thomas should be submitted.
2. Detailed plan for compensatory afforestation consisting of the geo-coordinates of the demarcated area for compensatory afforestation, geo-tagged photographs of the location,

ownership details and number, type and species of trees, shrubs, herbs and climbers included in the afforestation program.

3. A certificate from a revenue official not below the rank of Tahsildar with duly signed cadastral level map published in the website of KSBB demarcating the ESA and non-ESA areas in the village. Certificate from the Tahasildar to include the nature of land, nature of possession and a report on natural hazards like landslides, etc., if any.

The Committee also noted that the restrictions of moderate hazard zone is applicable in this case.

24. SIA/KL/MIN/62708/2019, 1901/EC4/2021/SEIAA

Environmental Clearance for the Proposed Granite Building Stone Quarry of Mr. Abdul Rahim at Re Survey No. 147/46, 147/2A1, 147/2A2, 147/42, 147/43, 147/44, 147/41 at Thazhakkode Village, Kozhikode Taluk, Kozhikode District, Kerala for an extent of 3.8830 Ha. (ADS Received)

Decision: The committee verified the documents submitted by the proponent and found them satisfactory and **decided to invite the proponent for presentation.**

25. SIA/KL/MIN/72951/2022, 1590/EC1/2019/SEIAA

Granite Building Stone Quarry Project of Mr. Eldho Issac over an extent of 4.7023 Ha in Survey. No. 208/1 of Alanallur- III Village, Mannarkkad Taluk, Palakkad District (ADS Received)

Decision: The committee verified the documents submitted by the proponent and **decided to entrust Dr K Vasudevan Pillai for verifying the documents and report.**

26. SIA/KL/MIN/136154/2020, 1609/EC1/2020/SEIAA

Environmental Clearance for Building Stone Quarry of Sri. Abdul Vahid.A in Block No: 37, Re Sy 111/1,110/2,110/2-1, Nagaroor Village, Chirayinkeezhu Taluk, District-Thiruvananthapuram (Study Report on hearing note received)

Decision: The committee heard the both the complainants and proponent (Proponent is represented by the person claiming to be a partner of the project as the applicant is reported to no more) The hearing note have been studied in detail by one of the member of SEAC and submitted a set of recommendations for deliberation of the committee and take appropriate decision. The committee discussed the report, salient aspects of the complaints and the response of the proponent and **decided to direct the proponent to submit the following additional documents:**

1. Detailed plan for additional measures for groundwater recharging by constructing groundwater recharging structure in the lower portions of the site and by channelizing the

overlap flow to the structures. This is required as the submission of the complainants regarding the water shortage in the area due to quarrying activities is a possibility.

2. Additional CER to address the water needs of the nearby population as precautionary measure.
3. Document to prove that proponent has not encroached to the Govt. land
4. Additional measures for protection of biodiversity.

PART 2

CONSIDERATION/RECONSIDERATION OF ENVIRONMENTAL CLEARANCE

1. SIA/KL/MIN/222256/2021 , 1919/EC4/SEIAA/2021

Environmental Clearance for the Proposed Granite Building Stone Quarry of Sri. Haridasan for an area of 3.5823 hectares at Re Survey No. 3/1047, 3/1419, 3/1416, 3/1418 of Engapuzha Village, Thamarassery Taluk, Kozhikode Kerala. (ADS Received)

Decision: The committee scrutinized the documents submitted by the proponent and found them satisfactory. Considering the depth to water table, the depth of mining should be limited to 75m AMSL. As per the decision of 123rd meeting of SEIAA the proponent is directed to submit the letter from the Wildlife Warden, regarding the distance of the proposed site from the Malabar Wild life Sanctuary, width of the approved/proposed ESZ near the site and a statement about whether the site falls within the ESZ or not. The Proponent should also submit proof of application submitted for clearance from the NBWL. Considering the steep slope in the area west of the BP4 &BP5 a protective wall and temporary wall of 5m height should be provided between BP4 & BP5. **The proposal shall be considered after getting the above details/ clarifications.**

2. SIA/KL/MIN/239186/2021 , 2056/EC1/2022/SEIAA

Granite Building Stone Quarry of Mr. Adeshkumar C.S at Survey No 208/1- 62,208-1-28 in Alanallur-III Village, Mannarkkad Taluk, Palakkad District, Kerala State for an extent of 0.9913Ha (Field Inspection Report received)

Decision: The committee discussed the field inspection report and noted that the mineable reserve is 294080 MT and annual production is 58816 MT. The mine life is 5 years. The depth to watertable is 12m bgl and source of water is bore well & quarry pit. The high hazard zone is at 2.15 km. On field verification it is observed that The proposed project site is on the lower foothills of the Silent Valley National Park (2.90 km) on its western side. Two quarries owned by Mannarkkad Taluk Karinkal Quarry Operators Vyavasaya Sahakarana Sangham are functioning within 200m radius of the proposed site having project areas of 1.1277ha and 0.9653 ha. **Based on discussion committee decided to direct the proponent to submit the following additional documents:**

1. Letter from the Wildlife Warden, regarding the distance of the site from the Wild life Sanctuary and the width of the proposed/approved ESZ appropriate to the site and a statement about whether the site falls within the proposed/approved ESZ. Also submit the proof of application submitted to the NBWL for wildlife clearance.
2. Report from a wildlife expert regarding the ecological sensitivity of the location considering the man-animal conflicts in the region.
3. Consent from the owners of abandoned quarry & well for drawing water for use in the proposed project site
4. Detailed plan for compensatory afforestation consisting of the geo-coordinates of the demarcated area for compensatory afforestation, geo-tagged photographs of the location, ownership details and number, type and species of trees, shrubs, herbs and climbers included in the afforestation program.
5. Geo-tagged location map of OB dumping site along with the proposed protection measures
6. Details of the proposed energy saving measures
7. Plan for sanitation and waste management arrangements
8. The floor area of the class rooms where tiling is proposed under CER activity, has to be ascertained and submitted
9. A traffic plan has to be prepared in consultation with the adjacent two quarry owners so as to minimize the disturbance to local people, using the road

The committee noted the specific conditions proposed in the field inspection report. The Committee also decided to bring to the notice of the SEIAA that the operation of the two quarries of Mannarkad Taluk Karinkal Quarry Operators Vyavasaya Sahakarana Sangham, functional adjacent to the proposed site, prima-facie is not in compliance to the conditions stipulated in the Mining Plan and EC and therefore, the matter may be brought to the notice of the Distirct Geologist and District Officer of the Pollution Control Board.

3. **SIA/KL/MIN/260249/2022 , 1976/EC1/2022/SEIAA
Environmental Clearance for the Proposed Granite (Building Stone) Quarry of of 0. Sri.P. A. SAID MUHAMMED, Managing Partner, M/s KORIAN GRANITES in Re-Survey No. 201/1 in Keralassery Village, Ottappalam Taluk, Palakkad District, Kerala for an extent 5684 Ha (ADS Received)**

Decision: The committee verified the documents submitted by the proponent and found them satisfactory except for the revised compensatory afforestation plan. The proposed area for compensatory afforestation plan seems to be rocky. **Hence committee decided to direct the proponent to submit an alternate area for compensatory afforestation along with coordinates of the proposed site, geotagged photographs of the site and ownership details of the site.**

4. SIA/KL/MIN/272889/2022 , 2144/EC1/2022/SEIAA

Laterite building stone quarry of Shri. Jaya Krishnan in Re Survey No. 2/5,5/2 of Ongallur-1 village , Pattambi Taluk, Palakkad (ADS Received)

Decision: The committee verified the documents submitted by the proponent and found them satisfactory. As per the Mining plan the total mineable reserve is 25,590 MTA and annual production is 17,913 MTA. The mine life is 3 years. Highest elevation of the Permit area is +166m MSL and lowest is +146 MSL. The proponent has not submitted cluster certificate. **The Committee decided to invite the proponent for presentation.**

5. SIA/KL/MIN/273506/2022 , 310/SEIAA/KL/1693/2014

Application for EC for Marath enterprises and Crusher Pvt. Ltd in Survey No. : 197/2(p), 198/8(p), 198/9(p) 198/2(p), 198/10(p) & 205/2(p) Koppam Village, Pattambi Taluk, Palakkad District, Kerala Judgment dated 26.08.2021 in WP (C) No.14476/2021 & judgment dated 22.08.2022 in WP(C) No.25902 of 2022filed by M/s Marath Enterprises and crushers Pvt. Ltd) (ADS Received)

Decision: The 131st meeting of the SEAC held during August 5-6 and 19-20, 2022 sought additional details required for appraising the project which included (i) Recent Cluster certificate, (ii) Recent Survey map certified by the Village Officer, (iii) Revised PFR incorporating pertinent details from the DSR or DSR, (iv) Revised Project Cost and (v) Revised EMP. The 133rd meeting of the SEAC held during October 11-13, 2022 verified the documents and observed that the documents submitted are not satisfactory. The proponent submitted an old cluster certificate dated 7.8.2015 instead of a recent one. As per this cluster certificate, the total project area within the cluster of 500m radius is more than 5ha and hence necessitates Environmental Impact Assessment study and Public Consultation. The 121st meeting of the SEIAA observed that there are no provisions/ norms to consider the representation of the Project Proponent and hence decided to direct the Project Proponent to apply for ToR and conduct EIA study & public hearing, which are mandatory as per existing norms. The Project Proponent was intimated accordingly vide letter dated 20.01.2023. The Standing Counsel was requested to intimate the latest position before the Hon'ble High Court vide letter dated 28.01.2023. The Standing Counsel vide e-mail dated 28.04.2023 forwarded WP (C) No.14880/2023 filed by M/s Marath Enterprises, in which SEIAA & SEAC were 1st & 2nd respondent respectively. The interim relief of the petitioner is to (i) direct the 3rd (Geologist, Palakkad) & 4th respondent(Village Officer, Koppam) to inspect the proposed lease area of the petitioner and file a report before the Hon'ble High Court stating whether there are any working granite quarry within a distance of 500 m from the periphery of the lease area of the petitioner within a time limit fixed by this Hon'ble Court pending disposal of the WP and (ii) direct the 1st respondent (SEIAA) to consider EXT P1 application prospectively in the light Ext.P2 as well as Ext.P7 & P8 judgments of the Hon'ble Court and untrammled by

Ext.P11 to P13 pending disposal of the WP. M/s Marath Enterprises and crushers Pvt. Ltd submitted certificate of Village Officer, Koppam dated 23.03.2022 via PARIVESH stating that only one quarry (CC Granites) is operational in nearby Sy.No.375/2 (1.527 Ha).

The committee verified the documents submitted by the proponent in detail and direction of the SEIAA. The committee observed that the project proponent has not submitted all the additional details required for completing the appraisal process. **Based on discussions the committee decided to conduct field inspection & entrusted the task to Dr. K Vasudevan Pillai and Dr. K N Krishnakumar.**

- 6. SIA/KL/MIN/276958/2022 , 2049/EC3/2022/SEIAA
Environmental Clearance for Granite Building Stone Quarry of M/s. Jesus Granites Pvt. Ltd. over an area of 1.4781 Hectare, situated in Survey No. 911/1- 5, 916/3, 916/3-2, 916/3-3, 916/3-4 of Kallorkad Village, Muvattupzha Taluk of Ernakulam District and Kerala - Adjacent quarry of Sri. Saji Abraham (SIA/KL/MIN/288750/2022; 2129/EC3/2022/SEIAA) shall also be considered, cluster situation warrants (ADS Received)**

Decision: The committee examined the documents submitted by the proponent and observed the following:

1. There are 2 quarries located adjacently belonging to the same proponent, M/s. Jesus Granites Pvt Ltd. (Proposal No. 276958 & 277815). Besides, there is a third quarry owned by Sri. Saji Abhraham adjacent to these quarries (Proposal No. 288750). On consideration of three adjacent quarries along with the nearby working quarry owned by the proponent, it comes under cluster condition and therefore requires a detailed EIA study and comprehensive EMP Report and public consultation. The SEAC has already directed the quarry owner, Mr. Saji Abhraham to conduct EIA study and prepare EMP report.
2. The two quarries belonging to M/s Jesus Granites, having an area of 1.4781 Ha & 1.4962 Ha are located adjacently and therefore, it is necessary to integrate the Mining Plan for improving the production & better environmental mitigation. Therefore the proponent is directed to submit an integrated Mining Plan prior to submitting ToR for EIA & EMP.
3. The committee also examined the documents submitted by the proponent and found them satisfactory.
4. The committee also observed that there is an operational quarry having an area 1.944 Ha on the western side of the quarry of Jesus granites owned by Sri. Jimmy Jose, who is also the Managing Director of M/s Jesus granites.

The above points are brought before SEIAA for consideration and direction to the proponent for further action.

7. SIA/KL/MIN/277815/2022 , 2050/EC3/2022/SEIAA

Environmental Clearance for Granite Building Stone Quarry of M/s. Jesus Granites Pvt. Ltd. over an area of 1.4962 Hectare, situated in Survey No. 916/1- 2, 916/1-2-2, 916/3-4, 917/1, 1122/1 of Kallorkad Village, Muvattupzha Taluk of Ernakulam District and Kerala- Adjacent quarry of Sri. Saji Abraham (SIA/KL/MIN/288750/2022; 2129/EC3/2022/SEIAA) shall also be considered, cluster situation warrants. (ADS Received)

Decision: The committee examined the documents submitted by the proponent and observed the following:

1. There are 2 quarries located adjacently belonging to the same proponent, M/s. Jesus Granites Pvt Ltd. (Proposal No. 276958 & 277815). Besides, there is a third quarry owned by Sri. Saji Abhraham adjacent to these quarries (Proposal No. 288750). On consideration of three adjacent quarries along with the nearby working quarry owned by the proponent, it comes under cluster condition and therefore requires a detailed EIA study and comprehensive EMP Report and public consultation. The SEAC has already directed the quarry owner, Mr. Saji Abhraham to conduct EIA study and prepare EMP report.
2. The two quarries belonging to M/s Jesus Granites, having an area of 1.4781 Ha & 1.4962 Ha are located adjacently and therefore, it is necessary to integrate the Mining Plan for improving the production & better environmental mitigation. Therefore the proponent is directed to submit an integrated Mining Plan prior to submitting ToR for EIA & EMP.
3. The committee also examined the documents submitted by the proponent and found them satisfactory.
4. The committee also observed that there is an operational quarry having an area 1.944 Ha on the western side of the quarry of Jesus granites owned by Sri. Jimmy Jose, who is also the Managing Director of M/s Jesus granites.

The above points are brought before SEIAA for consideration and direction to the proponent for further action.

8. SIA/KL/MIN/288699/2022 , 2136/EC3/2022/SEIAA

Environmental Clearance for the Building Stone Quarry project of P J Jose for an Area of 2.7057 Ha. at Pindimana Village, Kothamangalam Taluk, Ernakulam, Kerala (ADS Received)

Decision: The committee scrutinized the documents submitted by the proponent and found them satisfactory. The committee also examined the clarification regarding cluster certificate condition received from Mining and Geology Department. It indicates that there is a cluster situation.

Therefore committee decided to direct the proponent to submit application for ToR for conducting EIA study & EMP.

9. SIA/KL/MIN/400725/2022 , 2128/EC6/2022/SEIAA

Environmental Clearance for Laterite building Stone Quarry Project of Sri..Mohammed Shafi. E for an area of 0.8593 Ha at Re-Survey No- 449/2 in Vazhakkad Village, Kondotty Taluk, Malappuram (ADS Received)

Decision: The committee examined the documents submitted by the proponent and found them satisfactory. The committee noted that the recoverable resource is 84556.5 MT and proposed mine life of 4 years. The project cost is 35 lakhs. **Based on discussions, the Committee decided to recommend EC for a period of four years with the following specific conditions in addition to general conditions:**

1. The excavation activity associated should not involve blasting.
2. The excavation activity should be restricted to a maximum depth of 2m below general ground level at the site.
3. The excavation activity should be restricted to 2m above the ground water table at the site.
4. The excavation activity should not alter the natural drainage pattern of the area.
5. The excavated pit should be restored by the project proponent for useful purpose.
6. Appropriate fencing all around the excavated pit should be made to prevent any mishap
7. Measures should be taken to prevent dust emission by covering of excavated earth during transportation.
8. Safeguards should be adopted against health risks on account of breeding of vectors in the water bodies created due to excavation of earth.
9. Workers/labourers should be provided with facilities for drinking water and sanitation.
10. A berm should be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation.
11. A minimum distance of 50m from any civil structure should be kept from the periphery of the project area.
12. No water logging should be allowed in the mine pit. Appropriate drainage should be ensured from the project area prior to the commencement of mining.
13. The drain should be provided with silt traps and siltation pond and the overflow water should be clarified and drained to the nearest natural drain without any hindrance.
14. The drainage system should be cleaned and desilted periodically to facilitate unhindered drainage.
15. Measures incorporated in the CER should be implemented as per norms
16. Transportation of mined material should not be done during the peak hours in the forenoon (8.30am to 10.00am) and afternoon (3.30pm to 5 pm)

10. SIA/KL/MIN/403066/2022 , 2163/EC3/2022/SEIAA

Environmental Clearance for the building stone quarry at Re Survey No. 300/1,300/2-1 Block no.41, of Thiruvaniyoor Village, Kunnathunadu Taluk, Ernakulam, Kerala for an Area of 0.9586 Ha of Sri. Saji K. Elias (ADS Received)

Decision: The Committee examined the documents submitted by the proponent and found that as per the cluster certificate dated 03.12.2012, there are 6 adjacent quarries of which 2 are working and 4 are not working. Letter from Mining and Geology Dated 19.04.23 informed that the 4 Non-working quarries were not closed as per the approved mine closure plan. **Therefore there is a cluster condition and the committee decided to direct the proponent to submit application for ToR for conducting EIA/EMP.**

11. SIA/KL/MIN/403254/2022 , 2172/EC4/SEIAA/2022

Environmental Clearance for Laterite building stone quarry of Mr. George Joseph, over an extent of 0.1936 Ha, at Re-Survey No.143/61,63(143/1) in Perumanna Village, Kozhikode Taluk, Kozhikode District, Kerala, for an extent of 0.1936 Ha (ADS Received)

Decision: The committee examined the documents submitted by the proponent and found them satisfactory. The committee noted that the total mineable reserve is 28740 M T (recoverable quantity 20118 MT) and mine life is 2 years. The elevation difference is 95-88m and the mine void is 6m. The nearest house is at 121.2m. The presentation was done in 13.03.2022. Based on discussions, the Committee decided to recommend EC for the life of mine of two years subject to the following Specific Conditions in addition to General Conditions:

1. The excavation activity associated should not involve blasting.
2. The excavation activity should be restricted to 2m above the groundwater table at the site.
3. The excavation activity should not alter the natural drainage pattern of the area.
4. The excavated pit should be restored by the project proponent for useful purpose.
5. Appropriate fencing all around the excavated pit should be made to prevent any mishap
6. Measures should be taken to prevent dust emission by covering of excavated material during transportation.
7. Safeguards should be adopted against health risks on account of breeding of vectors in the water bodies created due to excavation of earth
8. Workers/labourers should be provided with facilities for drinking water and sanitation
9. A berm should be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation
10. A inimum distance of 50m from any civil structure should be kept from the periphery of the project area
11. No water logging should be allowed in the mine pit. Appropriate drainage should be ensured from the project area prior to the commencement of mining.
12. The drain should be provided with silt traps and siltation pond and the overflow water

should be clarified and drained to the nearest natural drain without any hindrance.

13. The drainage system should be cleaned and desilted periodically to facilitate unhindered drainage.
14. Measures incorporated in the CER should be implemented as per norms
15. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).

12. SIA/KL/MIN/404158/2022 , 2164/EC3/2022/SEIAA

Granite Building Stone Quarry of Sri. Bobby Kuriakose at Re-Sy Block No: 6, Re-Sy. Nos: 124/5-1-3, Kodikkulam Village, Thodupuzha Taluk, Idukki District, Kerala State (ADS Received)

Decision: The committee verified the documents submitted by the proponent and found them satisfactory except the recently certified survey map. **The committee decided to invite the project proponent for presentation.**

13. SIA/KL/MIN/405925/2022 , 1527/EC1/2019/SEIAA

Granite building Stone Quarry of Shri. K M Stephen in Re-Sy. Block no. 37, ReSy. Nos. 399/2, 399/2-1, 399/2-2, 399/2-3, 399/3, 745/2, 745/3, 745/4, 745/5, 745/7, 745/8, 745/9, 745/10, 745/11, 745/12, 745/13, 745/14, 746/1, 746/2, 746/2-1, Karimannur Village, Thodupuzha Taluk, Idukki, Kerala (ADS Received)

Decision: The committee heard the complainant and proponent in the 140th meeting held on 13th to 15th March 2023 and sought detailed hearing note from both parties within 2 weeks. The proponent has submitted a detailed hearing note on 11.04.23 answering the allegation of the complainants. The complainants have not yet submitted a hearing note even after the prescribed time period. In these circumstances, **Committee decided to recommend the issuance of EC for a period of 5 years subject to the following specific conditions in addition to the general conditions:**

1. The mining should be limited to the depth of 95m above MSL, considering the depth to water table reported as 90m above MSL.
2. Blasting should be conducted with a maximum of 30 holes in a blast round using 32mm diameter blast holes drilled with handheld Jack hammer drill to a maximum depth of 1.5m and each hole charged with a maximum of 250gm of explosive.
3. Nonel based shock-tube detonators should be used for initiation so as to have hole to hole delay of 17ms and 25ms and accordingly row to row delay of 25ms or 42ms.
4. Adequate muffling arrangements should be made to restrict fly rocks within 10m.
5. The impact of vibration due to blasting on the nearest houses and built structures should be monitored in terms of Peak Particle Velocity and amplitude for maximum charge per delay and included in the Half Yearly Compliance Report.

6. The garland canal, silt traps, siltation pond and outflow channel covering the entire project area should be provided with immediate effect. The outflow channel should be connected to the nearest natural drain.
7. The siltation pond should be set up at the bottom portion of the site so as to prevent outflow of turbid water.
8. The proponent should periodically clean and maintain the garland canal, silt traps, outflow channel and connected drains and geo-tagged photographs of the activity should be submitted along with Half Yearly Compliance Reports.
9. The garland canal, catchwater drains, silt traps, water holding and clarifier pond and outflow channel should be cleaned and desilted periodically and geo-tagged photographs of the process should be included in the Half Yearly Compliance Report.
10. Overburden dumping site should be provided with protective walls in the lower slope portion of the project area and overburden dump should be protected with retention wall of appropriate height.
11. Planting of trees of local species on both sides of the road within the project site should be completed prior to commencement regular mining.
12. The green belt should be developed and nurtured on a regular basis and the status of the green belt should be uploaded along with geo-tagged photographs in the HYCR
13. Compensatory afforestation should be done with indigenous species of trees as mentioned in the biodiversity in the land earmarked for the purpose. The geo-tagged photographs of the compensatory afforestation site should be uploaded along with the HYCR.
14. Environment Management Cell (EMC) should include one subject expert in environment management. The proceedings of the monthly meeting of the EMC should be submitted along with the HYCR
15. Transportation of mined material should not be done during the peak hours in the forenoon (8.30am to 10.30am) and afternoon (3.30pm to 5 pm).
16. Adequate sanitation, waste management and rest room facilities should be provided to the workers
17. Adequate energy conservation measures should be implemented including solar power installations
18. The overburden material should be stored at the designed place and the height of the retaining wall should be raised appropriately for protecting the overburden stock.
19. It is desirable to erect a temporary barrier with light roofing material covering the boundary of the project area connecting Boundary Pillar No. 5,4,3,2,1,21,20,19,18,17 and 16.

14. SIA/KL/MIN/407320/2022 , 2171/EC4/2022/SEIAA

Environmental Clearance for the Proposed Laterite (Building Stone) Quarry in Block No. 107, Re-Survey No: 86/2503 of Maniyoor Village, Thaliparamba Taluk,

Kannur District, Kerala for an extent of 0.0972 Ha (ADS Received)

Decision: The committee examined the documents submitted by the proponent and found them satisfactory. The committee noted that the production is 8,505 MT and mine life is 1 year. The depth to the water table is 20m bgl and the elevation of the site varies from 97m to 103m above MSL. The Project cost is 2.5 lakhs. Based on discussions, **the Committee decided to recommend EC for the life of mine of one year subject to the following Specific Conditions in addition to General Conditions:**

1. The excavation activity associated should not involve blasting.
2. The excavation activity should be restricted to 2m above the groundwater table at the site.
3. The excavation activity should not alter the natural drainage pattern of the area.
4. The excavated pit should be restored by the project proponent for useful purpose.
5. Appropriate fencing all around the excavated pit should be made to prevent any mishap
6. Measures should be taken to prevent dust emission by covering of excavated material during transportation.
7. Safeguards should be adopted against health risks on account of breeding of vectors in the water bodies created due to excavation of earth
8. Workers/labourers should be provided with facilities for drinking water and sanitation
9. A berm should be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation
10. A minimum distance of 50m from any civil structure should be kept from the periphery of the project area
11. No water logging should be allowed in the mine pit. Appropriate drainage should be ensured from the project area prior to the commencement of mining.
12. The drain should be provided with silt traps and siltation pond and the overflow water should be clarified and drained to the nearest natural drain without any hindrance.
13. The drainage system should be cleaned and desilted periodically to facilitate unhindered drainage.
14. Measures incorporated in the CER should be implemented as per norms.
15. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).

15. SIA/KL/MIN/407637/2022 , 1747/EC1/2022/SEIAA

Granite (Building Stone) Quarry in Re-Survey Nos. 98/2-1, 98/1, 98/1-1 in Nellanad Village, Nedumangad Taluk, Thiruvananthapuram District, Kerala by Sri. Abdul Nazar A (Re uploaded the previous proposal No.SIA/KL/MIN/161967/2020) (ADS Received)

Decision: The committee examined the documents submitted by the proponent and observed that

the landslide potential of the site and its upstream and downstream portion of the terrain are very high. The site is located on the near summit region of a steep slope. There are many houses and other built structures and commercial establishments in the immediate downslope. Intensive activities like quarrying will have high magnitude impact on the houses and other infrastructure in the downstream. There is also a major road located at the downstream side of the valley portion and the development of access road will affect stability of the massive boulder situated in the adjacent land on the upstream side. **Considering all these aspects and by invoking the Precautionary Principle the committee decided to recommend rejection of the proposal due to the following reasons.**

1. **The site is located on a very steep slope with very high vulnerability to landslides/Landslips**
2. **There are many houses and other built structures and a major road at the downslope region of the proposed site. Any accidents or hazards in the proposed site will have very serious adverse impact on the land and properties of the downstream area.**

16. SIA/KL/MIN/408064/2022 , 2182/EC6/2023/SEIAA

Environmental Clearance for Laterite building stone quarry of Sri. Muhammed Afsal. T for an area of 0.5579 Ha Re-Survey No-134/2-9, 134/2-23, 137/3, 137/4 in Pulikkal Village, Kondotty Taluk, Malappuram (ADS Received)

Decision: The committee examined the documents submitted by the proponent and found them satisfactory. The committee noted that the recoverable reserve is 53697.875 MT and mine life is 3 years. The project cost is 20 lakh and the depth of final void is reported as 6m. The presentation was done in 140th meeting of SEAC. Based on discussions, **the Committee decided to recommend EC for the life of mine of three years subject to the following Specific Conditions in addition to General Conditions:**

1. The excavation activity associated should not involve blasting.
2. The excavation activity should be restricted to 2m above the groundwater table at the site.
3. The excavation activity should not alter the natural drainage pattern of the area.
4. The excavated pit should be restored by the project proponent for useful purpose.
5. Appropriate fencing all around the excavated pit should be made to prevent any mishap
6. Measures should be taken to prevent dust emission by covering of excavated material during transportation.
7. Safeguards should be adopted against health risks on account of breeding of vectors in the water bodies created due to excavation of earth
8. Workers/labourers should be provided with facilities for drinking water and sanitation
9. A berm should be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation
10. A minimum distance of 50m from any civil structure should be kept from the periphery

of the project area

11. No water logging should be allowed in the mine pit. Appropriate drainage should be ensured from the project area prior to the commencement of mining.
12. The drain should be provided with silt traps and siltation pond and the overflow water should be clarified and drained to the nearest natural drain without any hindrance.
13. The drainage system should be cleaned and desilted periodically to facilitate unhindered drainage.
14. Measures incorporated in the CER should be implemented as per norms
15. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).

17. SIA/KL/MIN/408697/2022 , 2183/EC6/2023/SEIAA

Environmental Clearance for Laterite building stone quarry of Sri. Abu Thahir. P. K for an area of 0.9496 Ha at Re-Survey Nos. 339/8, 338/1-1, 477/1-1 in Vazhakkad Village, Kondotty Taluk, Malappuram (ADS Received)

Decision: The committee examined the documents submitted by the proponent and found them satisfactory. The committee noted that the recoverable reserve is 99708 MT and mine life is 3 years. The depth of mine void is 6m. The project cost is 30 lakhs. The presentation was done in 140th meeting of SEAC. Based on discussions, **the Committee decided to recommend EC for the life of mine of three years subject to the following Specific Conditions in addition to General Conditions:**

1. The excavation activity associated should not involve blasting.
2. The excavation activity should be restricted to 2m above the groundwater table at the site.
3. The excavation activity should not alter the natural drainage pattern of the area.
4. The excavated pit should be restored by the project proponent for useful purpose.
5. Appropriate fencing all around the excavated pit should be made to prevent any mishap
6. Measures should be taken to prevent dust emission by covering of excavated material during transportation.
7. Safeguards should be adopted against health risks on account of breeding of vectors in the water bodies created due to excavation of earth
8. Workers/labourers should be provided with facilities for drinking water and sanitation
9. A berm should be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation
10. A minimum distance of 50m from any civil structure should be kept from the periphery of the project area
11. No water logging should be allowed in the mine pit. Appropriate drainage should be ensured from the project area prior to the commencement of mining.
12. The drain should be provided with silt traps and siltation pond and the overflow water

should be clarified and drained to the nearest natural drain without any hindrance.

13. The drainage system should be cleaned and desilted periodically to facilitate unhindered drainage.
14. Measures incorporated in the CER should be implemented as per norms
15. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).

18. SIA/KL/MIN/410973/2022 , 2216/EC6/2023/SEIAA

Environmental Clearance for the Laterite Building Stone Quarry Project of Sri. A. K. Soman for an area of 0.5623 Ha at Sy.Nos.118/10, 158/2 in Kavanur Village, Ernad Taluk, Malappuram (ADS Received)

Decision: The committee verified the documents submitted by the proponent and found them satisfactory. **The committee decided to invite the proponent for a presentation.**

19. SIA/KL/MIN/411101/2022 , 1847/EC1/2020/SEIAA

Granite Building Stone Quarry of Vijayan R, for an extent of 0.3900 Ha (39.00Areas) in Pallikkal Village, Varkala Taluk, Thiruvananthapuram (ADS Received)

Decision: The Committee examined the proposal to extract granite building stone 93,610 MT (18,722 MTA) and the mine life is 5 years. The hazard zone is at 24.45km. The filed inspection was conducted on 20.06.2022 and the presentation was done on 128th meeting of SEAC. Based on the discussion, **the Committee decided to recommend EC for a mine life of 5 years subject to the following Specific Conditions in addition to the General Conditions:**

1. Depth of mining should be limited to a maximum of 95m above MSL
2. Removal of the boulders within the proposed site and the large boulder just outside the project boundary should be done prior to commencement of mining.
3. Development of green belt to be initiated prior to the commencement of mining operation.
4. Compensatory afforestation to be initiated prior to the commencement of mining.
5. Retention wall of appropriate height should be provided at the overburden dumping site
6. CER Plan should be implemented within the first 2 Years and it should be operated and maintained till the mine closure plan is implemented
7. The haulage road should be maintained well with frequent sprinkling
8. Development of green belt using indigenous species should be initiated prior to the commencement of mining
9. Drainage system incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining.

10. Overflow water from the siltation pond should be discharged to the nearby natural drain after adequate filtration
11. Garland drain, silt-traps, siltation ponds and outflow channel should be desilted periodically and geo-tagged photographs of the process should be included in the half yearly compliance report (HYCR).
12. Drainage water should be monitored at different seasons by an NABL accredited lab and clear water should only be discharged into the natural stream. Geotagged photographs of the drainage and sampling site should be submitted along with HYCR.
13. Overburden should be stored at the designed place at lower elevation and gabbion wall should be provided for the topsoil and overburden storage sites
14. CER Plan should be implemented within the first 2 years and it should be operated and maintained till the mine closure plan is implemented.
15. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).
16. Adequate sanitation, waste management and rest room facilities should be provided to the workers.
17. Adequate energy conservation measures should be implemented including solar power installations. At least 40% of the energy requirement should be met from the solar power.
18. Environment Management Cell (EMC) should include one subject expert in environment management. The proceedings of the monthly meeting of the EMC should be submitted along with the HYCR.
19. Adequate number of avenue trees of indigenous species should be planted along both sides of the haulage road.

20. SIA/KL/MIN/77965/2019 , 1278/EC2/2019/SEIAA

Environmental Clearance for the Granite Building Stone Quarry Project of Sri. Jaisal M.P for an area of 3.8323 Ha at Sy.Nos. 269/1-5, 269/1-2, 269/1- 3,269/1-4 in Nediyrrippu Village, Ernad Taluk, Malappuram (ADS Received)

Decision: The committee verified the additional documents submitted by the proponent and found them satisfactory except the compensatory afforestation plan. The area proposed for compensatory afforestation is vegetated. So, alternate site for compensatory afforestation plan along with geo-coordinates of the proposed site, geo-tagged photographs of the proposed sites, and ownership details of the proposed site with proof needs to be submitted. The site is located within moderate hazard zone. **The committee decided to entrust Dr A V Raghu and Dr. V Gopinathan for field inspection and report.**

21. SIA/KL/MIN/81144/2019 , 1421/EC1/2019/SEIAA

Granite Building Stone Quarry of Ms. Malabar Blue Metals in Re Survey Nos. 570/5, 570/7, 570/11, 571/3, 571/4, 542/8 of Ambalappara-1 Village, Ottappalam Taluk,

Palakkad District (ADS Received)

Decision: The committee verified the additional documents submitted by the proponent and found them satisfactory. **The Committee decided to entrust Dr. Vasudevan Pillai and Dr. K N Krishnakumar for field inspection and report.**

22. SIA/KL/MIS/284787/2022 , 2099/EC6/2022/SEIAA

Environmental Clearance for the Proposed Expansion of Commercial Complex Project (Ozone Mall) to be developed by M/s Inoa Properties & Developers LLP (FIR Received)

Decision: The Committee discussed field inspection report and noted that the Proponent was accorded EC vide Order no. 864/SEIAA/EC1/3073/2015 dated 17-08-2017 by SEIAA for construction of Commercial Complex with validity up to 16-08-2024. The total Plot Area is 0.9816 ha. (9,816 m²) and total Built-up Area is 24,765.364 m². Another EC was issued vide order no. 778/SEIAA/EC1/904/2016 dated 01-06-2016 with validity of 6 months for removal of ordinary earth (excavated earth) of 20,000 m³. from the same area. The construction work as per the EC is not yet started. Now, the management decided to expand the project with addition of land of 9,584.17 m². and with addition of built-up area of 8,672.636 m². and with additional excavated earth of 8,000 m³. The cumulative plot area after the expansion will be 19,400.17 m². and the built-up area will be 33,438 m². and the excavated earth of 28,000 m³. The proposed project consists of Commercial retail shops, anchor shops, food court (600 seats), Family Entertainment centre, along with supporting infrastructure facilities. Total cost of the project proposed is Rs. 114 Crores. The Proposal was presented before the Committee in its 135th meeting and the Committee observed that the CER need to be revised as per the norms in the OM No F.No.22-65/2017- IA.III dated 30th September 2020. The Committee also noted the submission of the PP that he obtained CCR from IRO, MoEFCC, Bangalore dated 22.11.2022. The committee noted the specific conditions in the field inspection report and based on the discussion, **Committee decided to direct the proponent to submit the following additional documents:**

1. CER proposal in detail as per existing norms of the norms issued by MoEFCC, as it is informed that it is yet to be finalized.
2. CCR produced at the time of field inspection is to be uploaded in the Parivesh portal
3. Scope of improving energy conservation measures.

23. SIA/KL/MIS/285493/2022 , 2074/EC1/2022/SEIAA

Environmental Clearance for the proposed expansion within the existing Hospital premises (“Ananthapuri Hospital & Research Institute”) by M/s Ananthapuri Hospitals Private Limited by Dr. A. Marthanda Pillai, Chairman & Managing Director, M/s Ananthapuri Hospitals Private Limited, in Pettah Village, Thiruvananthapuram Taluk, Thiruvananthapuram District (Evaluation Report

received)

Decision: The committee scrutinized the additional documents submitted by the proponent and the report provided. The additional documents submitted are satisfactory except for the nature of land stated as the “Nilam”. The construction for expansion on the existing building and the MLCP proposed is partly under Nilam. In these circumstance, **the committee decided to defer the proposal to get the order regarding the conversion of land.**

24. SIA/KL/MIS/288438/2022 , 2104/EC6/2022/SEIAA

Environmental Clearance for expansion of existing facilities to be jointly developed by M/s Franciscan Sisters of st. Clare Charitable trust Arattupuzha and M/s Franciscan sisters of st. Clare Sanyaasa Samooam Pallissery (FIR Received)

Decision: The committee discussed the field inspection report and found that the application submitted with 5620 m² of existing building, 3,319.01 m² of building under construction and proposed built up area of 47,425.47 m². The total built up area after expansion is 56,365.22 m². Currently, a Palliative Hospital is functioning in the campus in a G+4 Block which is conceived as a ‘No Bill Hospital’. The expansion is intended to expand Palliative hospital, develop an Elder Village and establish a Humanitarian Hospital. On expansion, there will be 422 Rooms for inmates & accommodation facility for 100 staff along with other supporting infrastructure facilities. The project cost is Rs. 114.3 Cr. The Committee noted the specific conditions required for the project. **Based on the discussions, the committee decided to direct the proponent to submit the following additional documents:**

1. CER proposal in detail as per norms
2. Total proposed height of the structure
3. Floor area ratio of the proposed building.
4. Alternative Source of water to suggested bore well, if it fails to meet the water requirement.
5. Drainage plan considering the anticipated high overland flow during heavy rainfall events
6. Plan for discharging excess overland flow to a natural drain in the vicinity of the site
7. Details of the covered storage area for non-biodegradable waste
8. Possibility for enhancing solar power generation.

**CONSIDERATION/RECONSIDERATION OF ENVIRONMENTAL
CLEARANCE(Extension/Amendment/Corrigendum)**

1. SIA/KL/MIN/296253/2023 , 1597/EC4/2020/SEIAA

Extend validity of EC of the laterite mining project for the site Re Sy No.19/245 at Koodathai Village, Thamarassery Taluk, Kozhikode District, and Kerala with an

area of 0.8094 Hectors of Mr. Ramachandran.P. (ADS Received)

Decision: The committee scrutinized the documents submitted by the proponent and found them satisfactory. **Based on discussions committee decided to recommend EC for the extension of the project for remaining period of 3 years subject to the following specific conditions in addition to the general conditions:**

1. The excavation activity associated should not involve blasting.
2. The excavation activity should be restricted to 2m above the groundwater table at the site.
3. The excavation activity should not alter the natural drainage pattern of the area.
4. The excavated pit should be restored by the project proponent for useful purpose.
5. Appropriate fencing all around the excavated pit should be made to prevent any mishap
6. Measures should be taken to prevent dust emission by covering of excavated material during transportation.
7. Safeguards should be adopted against health risks on account of breeding of vectors in the water bodies created due to excavation of earth
8. Workers/labourers should be provided with facilities for drinking water and sanitation
9. A berm should be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation
10. A minimum distance of 50m from any civil structure should be kept from the periphery of the project area
11. No water logging should be allowed in the mine pit. Appropriate drainage should be ensured from the project area prior to the commencement of mining.
12. The drain should be provided with silt traps and siltation pond and the overflow water should be clarified and drained to the nearest natural drain without any hindrance.
13. The drainage system should be cleaned and desilted periodically to facilitate unhindered drainage.
14. Measures incorporated in the CER should be implemented as per norms
15. Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).

2. SIA/KL/MIN/162964/2020 , 125/SEIAA/KL/2335/2013

Renewal of Environment Clearance for the Building Stone Mine (Minor Mineral Mining) project of M/s Valluvanad Granites for an area of 4.8120 hectares at Sy Nos. 2/2 & 5/2 in Lakkidi-Perrur -1st Village, Lakkidi-Perrur Panchayat, Ottapalam Taluk Palakad, Kerala (ADS Received)

Decision: The committee scrutinized the documents submitted by the proponent and found them satisfactory. In the application, it is noted that the cluster certificate is not found uploaded by the proponent. Considering the area of the proposed site as 4.8120Ha. it is important to examine

cluster certificate. **Therefore proponent is directed to submit the recent Cluster Certificate from Mining and Geology Department.**

PART 3

CONSIDERATION/RECONSIDERATION OF ENVIRONMENTAL CLEARANCE

1. SIA/KL/INFRA2/418741/2023 , 2236/EC3/2023/SEIAA

Building Project Avigna Warehouse/ Logistics Park at Parakkadavu, Ernakulam in Re-Survey No.: 219/1, 219/2-4, 219/2-6, 219/2-5 & 219/2- 3,219/2-4- 2, 219/2-5-2, 219/2-6-2, 230/11, 230/1, 219/1-3, 220/1, 220/1-2, 219/2-2, 219/2, 230/7, 220/2, Parakkadavu Village, Aluva Tehsil, Ernakulam (Fresh proposal)

Decision: The Committee examined the application submitted by M/s Avigna Jeya Pvt. Ltd and noted that the total built-up area of the proposed project is 51,534.58 sq. m to be constructed phase-wise in a plot area of 86,425 sq.m. The construction of phase 1 of the project, that is the construction of ‘Warehouse 3’ along with the amenity units, having a total built-up area of 11,808.82 sq.m is in progress. The phase 1 is below the threshold built-up area of 20,000 sq.m as per EIA Notification 2006, EC was not acquired for the same. The total built-up area of 39,725.76 sq.m. **The Committee decided to invite the project proponent for a presentation.**

2. SIA/KL/MIN/131683/2019 , 1813/EC3/2020/SEIAA

Environmental Clearance for Granite Building Stone Quarry of Sri. N.A Thomas for an extent of 0.9668 Ha, Survey No 372/1A/3/8, 372/1A/4/9 & 372/1A/4/9 in Kottappady Village, Kothamangalam Taluk, Ernakulam - District, Kerala.(Field Inspection Report received)

Decision: The committee discussed the field inspection report conducted on 07.05.2023 and noted that the proposed site is situated in between two abandoned mines. The Project Proponent has not submitted the proof of application submitted to the NBWL for wildlife clearance. Therefore, **the Committee decided to direct the proponent to submit the following additional documents:**

1. Modified EMP incorporating site specific mitigation measures and monitoring requirements and the cost required for their implementation and transferring pre-project studies and infrastructure requirements to Project cost.
 2. Detailed plan for compensatory afforestation consisting of the geo-coordinates of the demarcated area for compensatory afforestation, geo-tagged photographs of the location, ownership details and number, type and species of trees, shrubs, herbs and climbers included in the afforestation program.
1. Letter from the Wildlife Warden, regarding the distance of the site from the Wild life Sanctuary and the width of the proposed/approved ESZ appropriate to the site and a statement about whether the site falls within the proposed/approved ESZ .
 2. Details of energy conservation measures to be adopted for the project.

3. Plan for planting in buffer zone
4. Latest cluster certificate

3. SIA/KL/MIN/140563/2020 , 1818/EC3/2020/SEIAA

Environment Clearance for mining permit of Building Stone Quarry owned by M/s Concrete Aggregates Industries over an extent of 2.7340 Ha at Re Sy No: 419/2, 419/3, 419/6- 4, 419/6, 419/6-2, 419/6-3, 420/1-2, 420/1-3-2, 420/3, 420/4, 421/3 Pattimattom Village, Kunnathunadu Taluk, Ernakulam, Kerala (From 125th SEIAA)

Decision: The 125th meeting of the SEIAA directed SEAC to verify whether the project proponent has carried out mining outside the lease area. **The Committee discussed the matter and decided to entrust Dr Mahesh Mohan and Dr. K N Krishnakumar for field inspection and report.**

4. SIA/KL/MIN/175300/2020 , 1987/EC3/2022/SEIAA

Environmental Clearance for the removal of Building Stone Minor Mineral Mining (Quarry) project of M/s Rock field Estates Pvt. Ltd. at Block No. 48 in Re-Survey No. 400/1, 400/2, 401/5-2, 406/5 of Chengalam (E) Village, Kottayam Taluk, Kottayam District, Kerala (FIR Received)

Decision: The 122nd SEIAA referred back the file with a direction to verify the compliance of the EC conditions in M/s Palathara Constructions Ltd. Accordingly the committee examined the project details and environmental clearance conditions and carried out field inspection through a sub committee. During the field inspection, the sub committee observed the following.

1. No benches are found as per the mine plan.
2. Buffer zone also is mined out
3. As per the directions of Department of Mining and Geology, the proponent has paid the pending amount of Rs. 3,63,71,064 for excess/ reserve material mined out.
4. Department of Mining and Geology has been agreed for the mine closure plan submitted (Letter from the DMG No. 1606/DOY/ML/2017 dt. 04.03.2023)
5. The mine closure has been completed (DMG No. 1606/DOY/ML/2017 dt. 04.03.2023; No. 1606/DOY/ML/2017 dt. 20/04/2023 and surrendered the lease on 19.04.2023)
6. A building is located at 51.5m from the nearby boundary of the proposed site of Rockfield Estates Pvt. Ltd.
7. The depth of the abandoned quarry is around 5m at most of the areas and the very old pit is having depth more than that. The oldest pit and the part of the pit created by Palathara constructions Pvt. Ltd. is kept as rainwater harvesting pond as per the mine closure plan.
8. The harvested rain water is utilised by the local government occasionally for distributing to local people.

9. One part of the pit (south west corner) is filled with earth material where planting is started

During the field inspection, the sub committee observed the following compliance/non-compliance of the EC conditions.

Specific Conditions	Status
The set back from the nearby thodu should be maintained.	Complied
A set back of 100 m from the nearby house should be maintained.	Complied

No.	General Conditions	Status
1	Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified	Complied
2	Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional	Complied
3	Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.	Complied
4	Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project	Not found during the visit as the mine operation is closed
5	Sprinklers shall be installed and used in the project site to contain dust emissions	Not found during the visit as the mine operation is closed
6	Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent	Complied
7	At least 10 percent out of the total excavated pit area should be retained as water storage areas and the remaining area should be reclaimed with stacked dumping and overburden and planted with indigenous plant species that are eco-friendly	Complied
8	Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented	Complied
9	The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mine	Complied
10	Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department	Not found during the visit as the as the mine operation is closed
11	Control measures on noise and vibration prescribed by KSPCB	Not found during the

	should be implemented	visit as the mine operation is closed
12	Quarrying activities should be limited to day time as per KSPCB guidelines	Not observed during the visit as the mine operation is closed
13	Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency	Not observed during the visit as the mine operation is closed
14	A licensed person should supervise/ control the blasting operations	Complied
15	Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials	Complied
16	Overburden materials should be managed within the site and the old quarries, if any, should be reclaimed and restored	Complied
17	Height of benches should not exceed 5 m and width should not be less than 5 m	Not complied
18	Mats to reduce fly rock blast to a maximum of 10 PPV should be provided	Not found during the visit as the mine operation is closed
19	Maximum depth of mining from general ground level at site shall not exceed 10m	Complied
20	No mining operations should be carried out at places having a slope greater than 45°	Complied
21	Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB	Not found during the visit as the mine operation is closed
22	The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc	
23	Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water	Not complied
24	The transportation of minerals should be done in covered trucks to contain dust emissions	Not found during the visit as the mine operation is closed
25	The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project	Not complied
26	Disposal of spent oil from diesel engines should be as specified under relevant Rules/Regulations	Not found during the visit as the mine operation is closed
27	Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department	operation is closed

28	A minimum buffer distance of 100m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided	Complied
29	100 m buffer distance should be maintained from forest boundaries	Complied
30	Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating the activity	Complied
31	All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives	Complied
32	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority	Mine operation is closed
33	The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner	Mine operation is closed
34	The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006	Complied
35	The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which, shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at www.seiaakerala.org . The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation	Complied
36	A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayat/ District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The	Complied

	Environmental Clearance shall also be put on the website of the company by the proponent	
37	The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional Office of MOEF, Govt. of India and also to the Directorate of Environment and Climate Change, Govt. of Kerala	Complied
38	The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public	Not found during the visit as the mine operation is closed
39	The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed	Complied
40	The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license on consent given by any other authority for the same project	Mine operation is closed

The Committee discussed the field inspection report and accepted the findings of the sub committee. Accordingly, M/s Palathara Constructions Pvt. Ltd. has not carried out quarrying in compliance to the mining plan. There are no benches provided to stabilize the slope and the mining is done from the buffer zones. The observations indicate that the Palathara Constructions Pvt. Ltd. has violated many of the EC conditions. **The Committee decided to place the above findings before the next meeting of the SEIAA.**

5. SIA/KL/MIN/176680/2020 , 1877/EC3/2021/SEIAA

Environmental Clearance for the extraction of Granite Building Stone of Mr. Siraj Hussain at Re-Sy:-281/2-3 of Mundakkayam Village, Kanjirappally Taluk, Kottayam - (Transferring of file from TOR to EC, Granite Building Stone Quarry of Siraj Hussain (From 125th SEIAA- ADS received)

Decision: The Committee noted the direction of the SEIAA in its 125th meeting along with the request of the project proponent to reconsider the decision to reject the proposal. The Authority decided to accept the request of the project proponent to defer the project till the receipt of the report from the District Crisis Management Group (DCMG) and also directed the SEAC to relook the matter on receipt of the report. **Considering that the report from the DCMG is not received, the Committee decided to defer the item.**

6. SIA/KL/MIN/238592/2021, 2114/EC3/2022/SEIAA

Laterite stone quarry project of Charls M. P., for an area of 0.1419 Ha., at Block No. 24, Re Survey No. 433/1, in Mulanthuruthy village, Kanayannoor Taluk, Ernakulam (Fresh Proposal)

Decision: The committee examined the application. As per the mining plan, mineable reserve is 7095MT for mine life of 1 year. **The Committee decided to invite the project proponent for presentation.**

7. SIA/KL/MIN/261677/2022 , 2180/EC3/2023/SEIAA

Laterite stone quarry project of CHARLS M. P., 0.1927 Ha., Block No. 24, ReSurvey No. 435/2-3, Mulanthuruthy village, Kanayannoor Taluk, Ernakulam (Fresh Proposal)

Decision: The committee examined the application submitted. As per the mining plan, the mineable reserve is 19270MT and mine life is 1 year. The project cost is 5 lakhs. **The Committee decided to invite the project proponent for presentation.**

7. SIA/KL/MIN/271891/2022 , 2687/A2/2019/SEIAA

Ordinary Earth Removal project over an area of 0.4947 Ha in survey no.473/1,473/1-1 of Velloor Village, Vaikom Taluk, Kottayam - (From 125th SEIAA- Document received)

Decision: The 125th SEIAA directed the proponent to revise the proposal and submit a plan for removal of soil to a depth of around 8m at the southern side & 2m in the northern side to maintain a gradient from North to South. The plan should be such that it should not affect the building at the boundary of the proposed site between BP2 and BP3. The committee is yet to receive the revised documents and hence **the proponent is directed to submit the documents through PARIVEH Portal.**

9. SIA/KL/MIN/277481/2022 , 2118/EC2/2022/SEIAA

Environment Clearance for mining permit of " M/s Minering Aggregates Private Limited" over an extent of 4.7998 Ha at Re-Sy Block No.:01, Re-Sy No.: 23/1 pt427, 23/1 pt426, 23/1 pt424 & 23/1 pt375, Kolathur Village, Kasaragod Taluk, Kasaragod District, Kerala (FIR Received)

Decision: The committee discussed the field inspection report and noted that the total mineable reserve is 27,77,075MT and average annual production is 5,00,000MTA. The mine life is 7 years. The highest and lowest elevations are 65m and 100m respectively. The committee observed the following:

- There are local protest against the project as seen from the Posters seen in the area
- The proponent suggests new road away from the locations of the the complainants
- An abandoned quarry pit is present at the northern part of the project area.
- The land is under coconut , rubber and teak plantation.
- Soil thickness is around 2.2m
- Distance from River Chandragiri/Payaswini is only 65m
- Old quarry pit is without any benches and waterlogged.

The Committee decided to invite the project proponent for presentation.

10. SIA/KL/MIN/278920/2022 , 2091/EC6/2022/SEIAA

Environmental Clearance for the Granite Building Stone Quarry of Sri. Sajeer. K. T, for an area of 1.2008 Ha. at Block No.61, Re.Survey No. 3/4, 3 in Trikkalangode Village, Ernad Taluk, Malappuram (FIR received)

Decision: The committee discussed the field inspection report and noted that the mineable reserve is 501090 MT and average annual production is 41758 MTA. The mine life is 12 years. The depth to watertable is 6 m bgl. The highest and lowest elevations are 140 m and 9m respectively. The distance to Moderate Hazard Zone is 3.66 km. The Malabar WLS situated at distance of 40.67 km. The ESZ of Silent Valley is at 28.13 KM from the boundary. **The Committee decided to invite the project proponent for presentation.**

11. SIA/KL/MIN/413609/2023, 2204/EC1/2023/SEIAA

Laterite (Building Stone) Quarry of Sri. Suhaib Kunnan in Re-Survey Nos: 7/2-6, 7/2-12, 7/2-13, 7/2-20 of Koppam Village, Pattambi Taluk, Palakkad District, Kerala (Fresh file)

Decision: The committee scrutinized the application submitted by Sri.Suhaib Kunnan on 07.01.23. As per mining plan mineable reserve is 53,693 MT for mine life of 2 years. The project cost is 22 Lakhs. **The Committee decided to invite the project proponent for presentation.**

12. SIA/KL/MIN/415396/2023 , 2248/EC6/2023/SEIAA

Environmental Clearance for the Laterite Building Stone Project of Sri.Sharafudheen at Sy.Nos.533/1-33, 533/1-63 in Kuttippuram Village, Tirur Taluk, Malappuram (Fresh application)

Decision: The committee examined the application submitted by Sri. Sharafudheen. As per mining plan mineable reserve is 10,681 MT for mine life of 1 year. The project cost is 4 lakh. **The Committee decided to invite the project proponent for presentation.**

13. SIA/KL/MIN/417275/2023 , 2247/EC6/2023/SEIAA

Environmental Clearance for the mining of Clay by Sri. Vinod Vasudevan at Sy.Nos.312/PT1, 312/PT2, 342/1-1, 342/2-1, 342/1, 342/2-3 in Palur Village, Thalappilly Taluk, Thrissur (Fresh application)

Decision: The committee scrutinized the application submitted by Sri. Vinod N V.. **The Committee decided to invite the project proponent for presentation.**

14. SIA/KL/MIN/419350/2023 , 2253/EC6/2023/SEIAA

Environmental Clearance for the Laterite Building Stone Project of Sri.SATHEESH for an area of 0.0970 Ha at Sy.No.23/15 in Kavanur Village, Ernad Taluk, Malappuram (Fresh application)

Decision: The committee examined the application submitted by Sri. Satheesh. As per mining plan mineable reserve is 6790 MT for mine life of 1 year. The project cost is 10 lakh. **The Committee decided to invite the project proponent for presentation.**

15. SIA/KL/MIN/420651/2023 , 2242/EC4/2023/SEIAA

Environmental Clearance for the Proposed Laterite (Building Stone) Quarry of Sri.K.C.Ali, in Block no :91, Re-Survey No: 46/1356 of Kaliyad Village, Iritty Taluk, Kannur District, Kerala for an extent of 0.0971 Ha under B2 category.(Fresh Application)

Decision: The committee examined the application submitted by Sri. K C Ali. As per mining plan mineable reserve is 7,370 MT for mine life of 1 year. The project cost is 2 Lakh. **The committee decided to invite the proponent for presentation.**

16. SIA/KL/MIN/422360/2023 , 2244/EC4/2023/SEIAA

Environmental Clearance for the Proposed Laterite (Building Stone) Quarry of Sri.Ayanath Priyesh, in Block no: 138 Re-Survey Nos. 362/8, 362/41, 362/162, 362/237 of Chuzhali Village, Thaliparamba Taluk, Kannur District, Kerala for an extent of 0.3884 Ha under B2 category. (Fresh Application)

Decision: The committee scrutinized the application submitted by Sri. Ayanath Priyesh on 16.03.23. As per mining plan mineable reserve is 20,391 MT (10195.5 MT per annum) for mine

life of 2 years. The project cost is 10.54 Lakh. **The Committee decided to invite the project proponent for presentation.**

SIA/KL/MIN/423122/2023 , 2245/EC4/2023/SEIAA

Environmental Clearance for the Proposed Laterite (Building Stone) Quarry of Sri.Sabi.A, in Block no: 138 Re-Survey Nos. 362/8, 362/41, 362/162, 362/237 of Chuzhali Village, Thaliparamba Taluk, Kannur District, Kerala for an extent of 0.3884 Ha under B2 category. (Fresh Application)

Decision: The committee scrutinized the application submitted by Sri. Sabi.A on 23.03.2023. As per mining plan mineable reserve is 8496 MT for mine life of 1 year. The project cost is 2.60 Lakh. **The Committee decided to invite the project proponent for presentation.**

17. SIA/KL/MIN/423901/2023 , 2243/EC4/2023/SEIAA

Environmental Clearance for the Proposed Laterite (Building Stone) Quarry of Sri Pacheni Rameshan, in Block no :138, Re-Survey No: 362/29 of Chuzhali Village, Taliparamba Taluk, Kannur District, Kerala for an extent of 0.0971 Ha under B2 category.(Fresh Application)

Decision: The committee examined the application submitted by Sri. Pacheni Rameshan. As per mining plan mineable reserve is 8,496.25 MT for a mine life of 1 year. The project cost is 2 lakh. **The Committee decided to invite the project proponent for presentation.**

18. SIA/KL/MIN/423945/2023 , 2260/EC4/2023/SEIAA

Environmental Clearance for the Proposed Laterite (Building Stone) Quarry of Sri.Babu.K, in Block no :138, Re-Survey No: 362/29 of Chuzhali Village, Taliparamba Taluk, Kannur District, Kerala for an extent of 0.0971 Ha under B2 category.(Fresh Application)

Decision: The committee scrutinized the application submitted by Sri. Babu.K. As per mining plan mineable reserve is 16,993MT for mine life of 1 year. Project cost is 7.40 Lakh. **The Committee decided to invite the project proponent for presentation.**

SIA/KL/MIN/423966/2023 , 2259/EC4/2023/SEIAA

Environmental Clearance for the Proposed Laterite (Building Stone) Quarry of Sri.Biju Mon George, in Block no :138, Re-Survey No: 362/29 of Chuzhali Village, Taliparamba Taluk, Kannur District, Kerala for an extent of 0.0971 Ha under B2 category.(Fresh Application)

Decision: The Committee examined the application submitted by Sri. Biju Mon George. As per the mining plan mineable reserve is 13,594 MT for a mine life of 1 year. The project cost is 2.11 Lakh. **The Committee decided to invite the project proponent for presentation.**

19. SIA/KL/MIN/424608/2023 , 2249/EC4/2023/SEIAA

Environmental Clearance for the Proposed Laterite (Building Stone) Quarry of Sri.Cheriya Vilappinakath Siyad, in Block no :138, Re-Survey No: 362/29 of Chuzhali Village, Taliparamba Taluk, Kannur District, Kerala for an extent of 0.0971 Ha under B2 category.(Fresh Application)

Decision: The Committee examined the application submitted by Sri. Cheriya Vilappinakath Siyad. As per mining plan mineable reserve is 17,710 MT for the mine life of 1 year. The project cost is 5 lakh. **The Committee decided to invite the project proponent for presentation.**

20. SIA/KL/MIN/424892/2023 , 2258/EC4/2023/SEIAA

Environmental Clearance for the Proposed Laterite (Building Stone) Quarry of Sri.Narayanan K.V, in Re-Survey No: 1/118 of Kuttoor Village, Payyannur Taluk, Kannur District, Kerala for an extent of 0.1942 Ha under B2 category.(Fresh Application)

Decision: The Committee scrutinized the application submitted by Sri. Narayanan K.V. As per mining plan, the mineable reserve is 13594 MT for mine life of 1 year. The project cost is 7.40 lakh. **The Committee decided to invite the project proponent for presentation.**

**CONSIDERATION/RECONSIDERATION OF ENVIRONMENTAL
CLEARANCE(Extension/Amendment/Corrigendum)**

1. SIA/KL/MIN/296717/2023 , 1957/EC6/2022/SEIAA

Application for the extension of EC for the Granite Building Stone Quarry of KNRC Holdings & Investments Pvt Ltd (Fresh application)

Decision: The Committee verified the documents submitted by the project proponent and noted that the EC vide Order no. DEIAA/MAL/EC/010/2017 dated 13.04.2018 was issued by DEIAA, Malappuram to Abdul Rahoof, Managing Partner, M/s Jai Hind Concrete Products which was transferred to the project proponent Sri. V Venugopal Reddy, M/s KNRC Holdings and Investments PVT Ltd. by SEIAA on 19.05.2022. As per the OM dated 28.04.2023, all the ECs issued from the DEIAAs are to be reappraised by SEIAA afresh. Therefore, the project proponent has to submit the required documents as envisaged in the OM through PARIVESH portal and the District Collectors have to forward all the documents on the basis of which the

ECs were issued within one month. **The Committee decided to invite the project proponent for presentation.**

CONSIDERATION OF TOR PROPOSALS

1. SIA/KL/MIN/426310/2023 , 2257/EC4/2023/SEIAA

Application for ToR for the Granite Building Stone Quarry Project of M/s Ellora Stones, at Survey No. 291/2, 293/101, 293/103, 293/104, 293/105, 293/106, 293/107, 293/108, 293/110, 293/112, 293/3, 299/103, 299/109, 299/4, 348/1 at Block No. 45 of Vayakkara Village and 135/1, 135/101, 135/116, 135/118, 135/119, in Block No. 42 of Peringome Village, Payannur Taluk, Kannur District, and Kerala State (Fresh Application)

Decision: The Committee examined the proposal and **decided to recommend Standard ToR with the following additional studies:**

1. Vibration studies to evaluate the zone of influence and impact of blasting on the neighborhood as suggested in para (e) of OM No Z -11013/57/2014-IA.II (M) dated 29-10-2014 of MOEF&CC
2. A comprehensive EMP considering the adjacent quarry.

General

Considering the requests from the Proponents, it is decided that the Chairman, SEAC will be available for clarifications on the decisions of the SEAC over phone (9447048526) or email (akvarmaseac@gmail.com) or in person based on prior appointments, preferably in the AN of Monday.

The meeting ended at 6.15 pm.

It is decided to convene the 144th meeting of the SEAC on 6th & 8th of June 2023.

Sd/-
Suneel Pamidi, IFS
Secretary, SEAC

Sd/-
Dr.Ajayakumar Varma
Chairman, SEAC

Sl.No.	Name	25.05.2023	26.05.2023
1.	Shri. Sheik Hyder Hussain	√	√
2.	Dr.A.Bijukumar.	X	X

3.	Dr.A.N.Manoharan	√	√
4.	Shri. M.Dileepkumar	√	√
5.	Smt. Beena Govindan	√	√
6.	Dr.C.C.Harilal	X	X
7.	Dr.K.VasudevanPillai	√	√
8.	Dr.MaheshMohan	√	√
9.	Dr.K.N.Krishna kumar	√	√
10.	V.Gopinathan	√	√
11.	Dr.A.V.Raghu	√	√
12.	Dr.N.Ajithkumar	√	√
13.	Shri.Suneel Pamidi,IFS (Secretary)	X	√
14.	Dr.R.Ajayakumar Varma (Chairman)	√	√

M/s. MINERING AGGREGATES PRIVATE LIMITED

Door No. 17/436A, Kurishupally Road, ADAT
Thirussur District, Kerala State, Pincode-680551.
Ph No: +91 9995551625.

To,

Date: 10-09-2023

The Member Secretary

State Level Expert Appraisal Committee (SEAC)

Directorate of Environment & Climate Change

4th Floor, KSTRC Bus

Terminal, Thampanoor,

Kerala-01.

Respected Sir,

Ref: E.C Proposal No. SIA/KL/MIN/277481/2022

Sub: Reply to ADS query for Environmental Clearance proposal of “Granite Building Stone Quarry M/s Minering Aggregates Private Limited”.

Please find the following essential documents as mentioned in the ADS query for Environmental Clearance proposal of “Granite Building Stone Quarry M/s Minering Aggregates Private Limited” over an extent of 4.7998 Ha. Re-Sy No.: 23/1 pt427, 23/1 pt426, 23/1 pt424, 23/1 pt375 of Kolathur Village, Kasaragod Taluk, Kasaragod District, Kerala.

1. Compensatory Afforestation plan along with geo-coordinates of the proposed site, geotagged photographs of the proposed sites & ownership details with proof is attached as **Annexure – 1**
2. Modified Drainage plan is attached as **Annexure – 2**
3. Road development plan is attached as **Annexure – 3**
4. Legible Survey map certified by Village officer including build structures, Houses and other buildings and infrastructure within 200m radius of the boundary of the proposed site is attached as **Annexure– 4.**

5. Detailed Plan for mitigating the adverse impacts on the river & riverine ecology consequent to the proposed mining adjacent to the river is attached as **Annexure – 5**

I request your good office to kindly accept the additional documents for further processing and issue of Environmental Clearance.

Thanking you
Sir, Yours
Faithfully



Sri. Antony S Alukkal
Authorized Signatory

COMPENSATORY AFFORESTATION PLAN
for
GRANITE BUILDING STONE QUARRY
of
M/s. MINERING AGGREGATES PRIVATE
LIMITED

Extent : 4.7998 Ha.

Re-Sy. Bl. No. : 01

*Re-Sy. Nos. : 23/1 pt427, 23/1 pt426, 23/1
pt424 & 23/1 pt375.*

Village : Kolathur Village

Taluk : Kasaragod

District : Kasaragod

State : Kerala

The list of trees present in the proposed project area is given in below table

SI No	Scientific Name	Family	Local Name	No of Trees to be Cut in Mining Area	No of Trees to be Retained in 7.5m Safety Zone	Total No of Trees
1	Gliricidia sepium	Fabaceae	Sheemakonna	02	28	30
2	Macaranga peitata	Euphorbiaceae	Vatta	28	76	104
3	Albizzia	Fabaceae	Vaaka	00	3	3
4	Artocarpus heterophyllus	Moraceae	Plaav	02	2	4
5	Hevea braziliansis	Euphorbiaceae	Rubber	625	1395	2020
6	Ailanthus triphysa	Simaroubaceae	Matti	01	4	5
7	Tectona grandis	Verbenaceae	Thekk	39	19	58
8	Areca catechu	Araceae	Kamuk	500	830	1330
9	Cocos nucifera	Arecaceae	Thengu	477	313	790
10	Mallotus philippensis	Euphorbiaceae	Sindhooram	10	20	30
11	Magnifera idica	Anacardiaceae	Maav	4	3	7
12	Grewia serrulata	Tiliaceae	Kottimaram	5	4	9
13	Careya raborea	Lecythidaceae	Pezh	4	2	6
14	Racosperma mangium	Mimosaceae	Manjium	5	9	14
15	Swietenia macrophylla	Meliaceae	Mahagoni	6	6	12
TOTAL				1708	2714	4422

From the above-mentioned table, It is clear that due to mining activities No of Tress to be cut in mining area - 1708. To compensate this tree cutting, Plantations will be done all along haul roads & 7.5m Safety zone. Apart from this, Plantation will also be done in compensatory afforestation area of 0.8987ha which is located at South-western part of the proposed area. The detailed plantation program is mentioned in below table;

Year	No of Plants	Green belt area covered	Location
I-Year	500 Saplings	0.6464 Ha	Green belt area
II-Year	500 Saplings		
III-Year	500 Saplings	0.8987 Ha	Compensatory Afforestation Area
IV-Year	500 Saplings		
V-Year	500 Saplings		
Total	2500 Saplings	1.5451 Ha	

The Geo coordinates of compensatory Afforestation area of the proposed site is mentioned in the below table;

Boundary Pillars	Latitude	Longitude
1	N- 12°29'00.17"	E-075°06'03.61"
2	N- 12°28'59.26"	E-075°06'06.52"
3	N- 12°28'58.84"	E-075°06'07.02"
4	N- 12°28'58.28"	E-075°06'07.18"
5	N- 12°28'57.57"	E-075°06'06.75"
6	N- 12°28'57.27"	E-075°06'05.86"
7	N- 12°28'57.14"	E-075°06'04.14"
8	N- 12°28'56.92"	E-075°06'03.57"
9	N- 12°28'57.54"	E-075°06'02.45"
10	N- 12°28'58.77"	E-075°06'03.18"

The Compensatory Afforestation plan is attached as **Annexure – A**.

The Compensatory afforestation area of this proposed site is in the Re Sy No – 23/1 where the ownership details are enclosed below

1. Mr. Antony, Minering Aggregates Private Limited (Proponent Own Land)
2. Mr. Deepak, Nethravathi Organic PVT Limited.

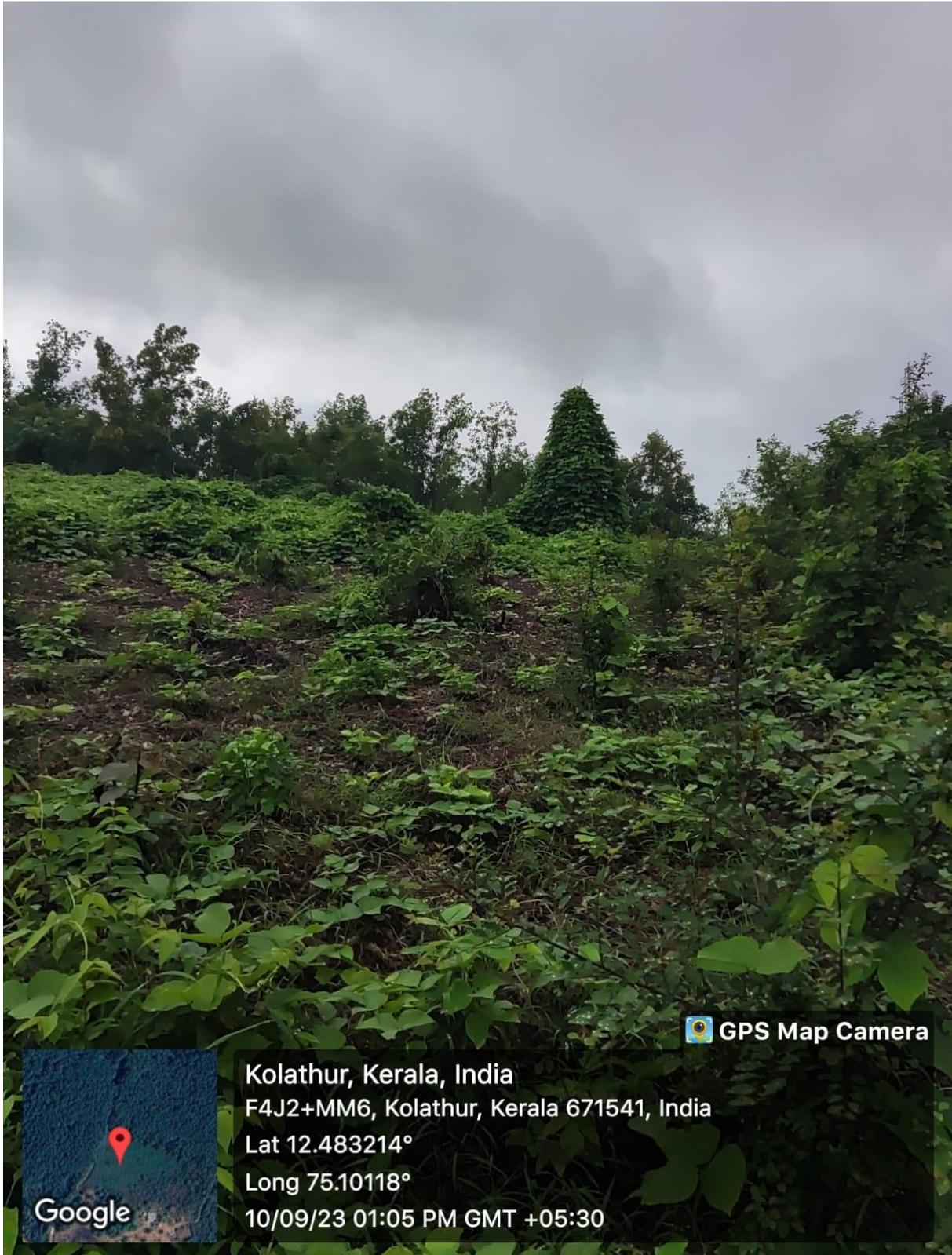
The Proof of Ownership details is attached **as Annexure - B**



Images: Geotagged Photographs of Compensatory Afforestation Area



Images: Geotagged Photographs of Compensatory Afforestation Area

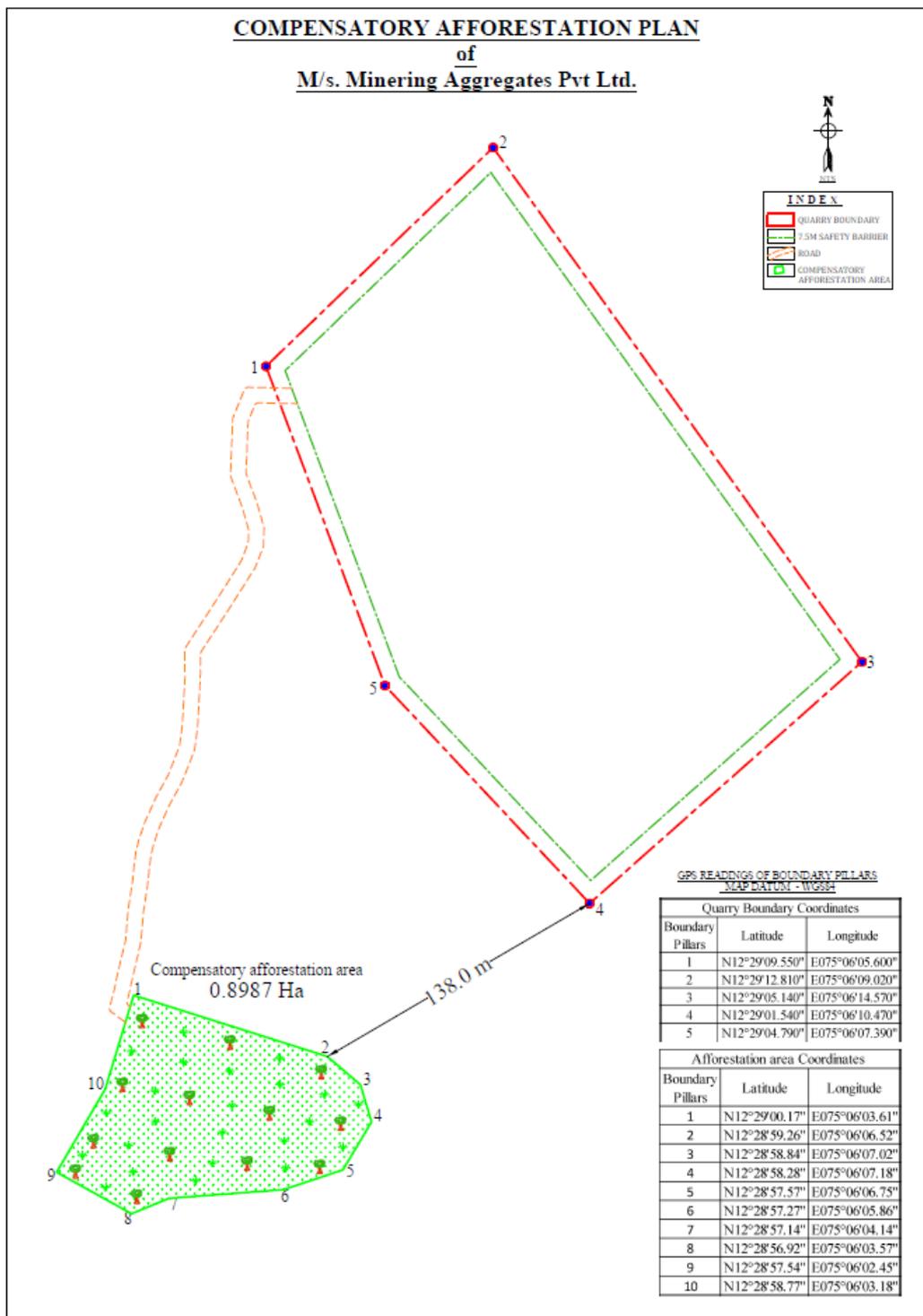


Images: Geotagged Photographs of Compensatory Afforestation Area



Images: Geotagged Photographs of Compensatory Afforestation Area

Annexure-A



Annexure-B

61
FORM 12 C
(See Rule 3)



GOVERNMENT OF KERALA
KOLATHUR VILLAGE OFFICE
POSSESSION CERTIFICATE



No. 80367816

Date: 08/09/2023

Name of Person to whom certificate is issued	NETHRAVATHI ORGANIC FARM PRIVATE LIMITED MANAGING DIRECTOR DEEPAK MOHANDAS
Name of Father	MOHANDAS
Address	DEEPTHI NIVAS, 0, S V COLONY ROAD
Post Office with PIN Code	KOZHICODE, 673006
District	Kozhikode

Certified that land shown in the schedule below are in possession and enjoyment of the person as stated above.

Taluk / Village	Old Survey No	Re-Survey Block	ReSurvey No	Extent in Ha	Thandapper No	Thandapper Name	Class of Land
Kasaragod/ Kolathur		075	23/1pt375	0.4047	1352		Dry
Kasaragod/ Kolathur		075	23/1pt424	2.5456	1352		Dry
Kasaragod/ Kolathur		075	23/1PT485	1.2950	1352		Dry
Kasaragod/ Kolathur		075	23/1pt67	0.4492	1352		Dry
Kasaragod/ Kolathur		075	23/1pt68	0.4047	1352		Dry
Kasaragod/ Kolathur		075	23/1pt92	0.1093	1352		Dry

Security Code : AA02D

NOTE:

1. This digitally signed document is legally valid as per the Information Technology (IT) Act, 2000.
2. Authenticity of this document can be verified from <http://edistrict.kerala.gov.in/> and submitting the Certificate Number and Security code. Alternatively, please contact : 155300, 0471155300, 04712335523



GOVERNMENT OF KERALA
KOLATHUR VILLAGE OFFICE
POSSESSION CERTIFICATE



No. 80367816

Date: 08/09/2023

Taluk / Village	Old Survey No	Re-Survey Block	ReSurvey No	Extent in Ha	Thandapper No	Thandapper Name	Class of Land
Kasaragod/ Kolathur		075	23/1pt93	0.7973	1352		Dry

Date of issue of certificate	08/09/2023
Designation of the Issuing officer	VILLAGE OFFICER
Purpose for which the certificate is issued for	SEIAA KERALA
Remarks	Nil

This certificate is issued on the basis of details given in the application and further verifications. Details, if any, given in the application and other documents attached along with documents are found to be incorrect at a later date, the competent authority has all the right to cancel the certificate without prior intimation.

This Certificate is valid only for the purpose mentioned above.

Security Code : AA02D

Digitally signed by SHASHI P S
Date:08-09-2023 14:25:15

NOTE:

1. This digitally signed document is legally valid as per the Information Technology (IT) Act, 2000.
2. Authenticity of this document can be verified from <http://edistrict.kerala.gov.in/> and submitting the Certificate Number and Security code. Alternatively, please contact : 155300, 0471155300, 04712335523

MODIFIED DRAINAGE PLAN*for***GRANITE BUILDING STONE QUARRY***of****M/s. MINERING AGGREGATES PRIVATE
LIMITED***

Extent : 4.7998 Ha.

Re-Sy. Bl. No. : 01

*Re-Sy. Nos. : 23/1 pt427, 23/1 pt426, 23/1
pt424 & 23/1 pt375.*

Village : Kolathur Village

Taluk : Kasaragod

District : Kasaragod

State : Kerala

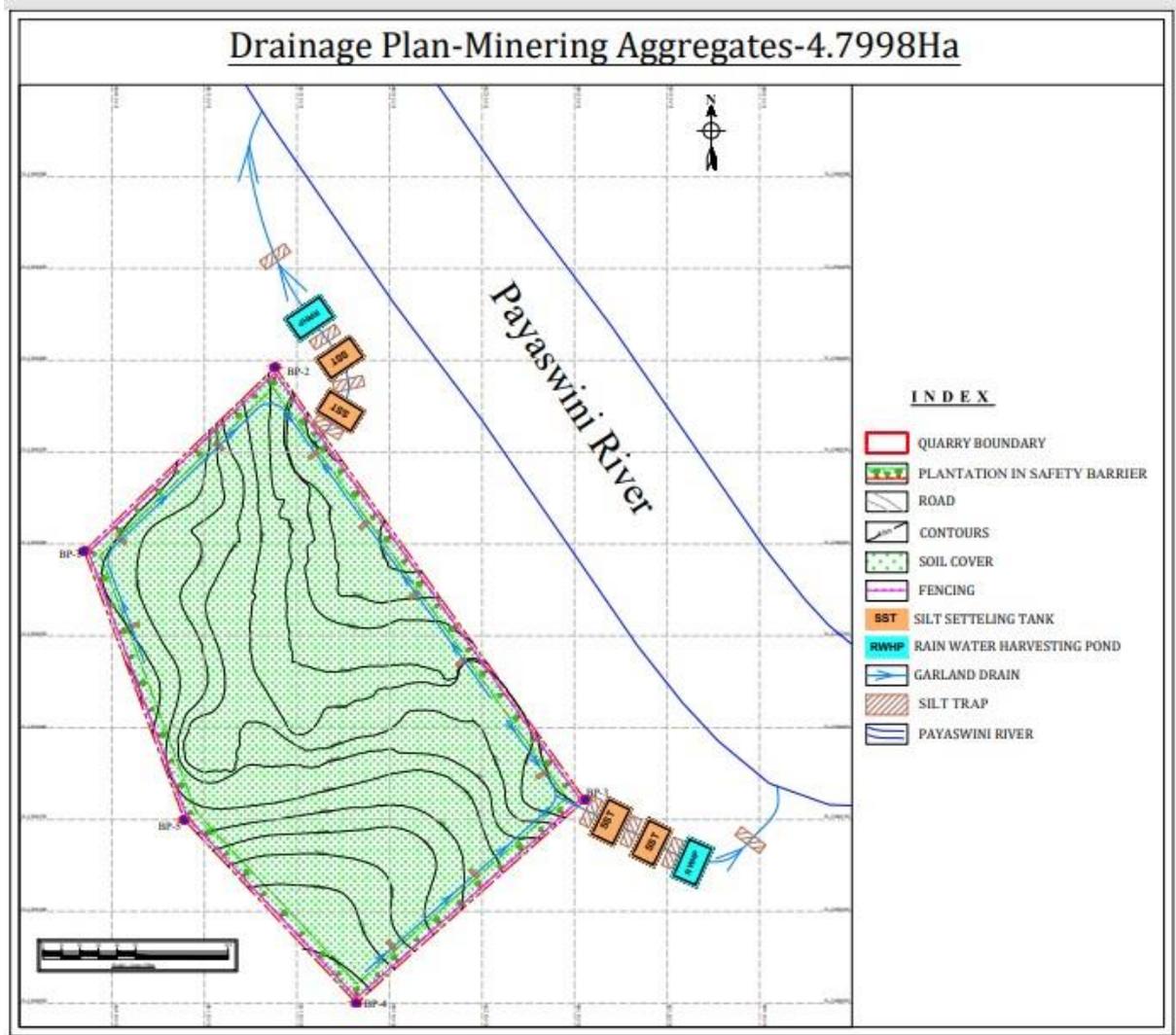
Garland drains shall be constructed all along the periphery of the quarry, Four Silt Settling Tanks (near BP-02 & BP-03) will be constructed. Following the SST's, Two Rainwater Harvesting Pond (near BP-02 & BP-03) shall be constructed.

The water from garland drains shall be routed through Silt Settling Tanks (SST) to settle suspended solids & then the overflow water shall be routed to Rainwater Harvesting Ponds(RWHP) Before being discharged to natural water course.

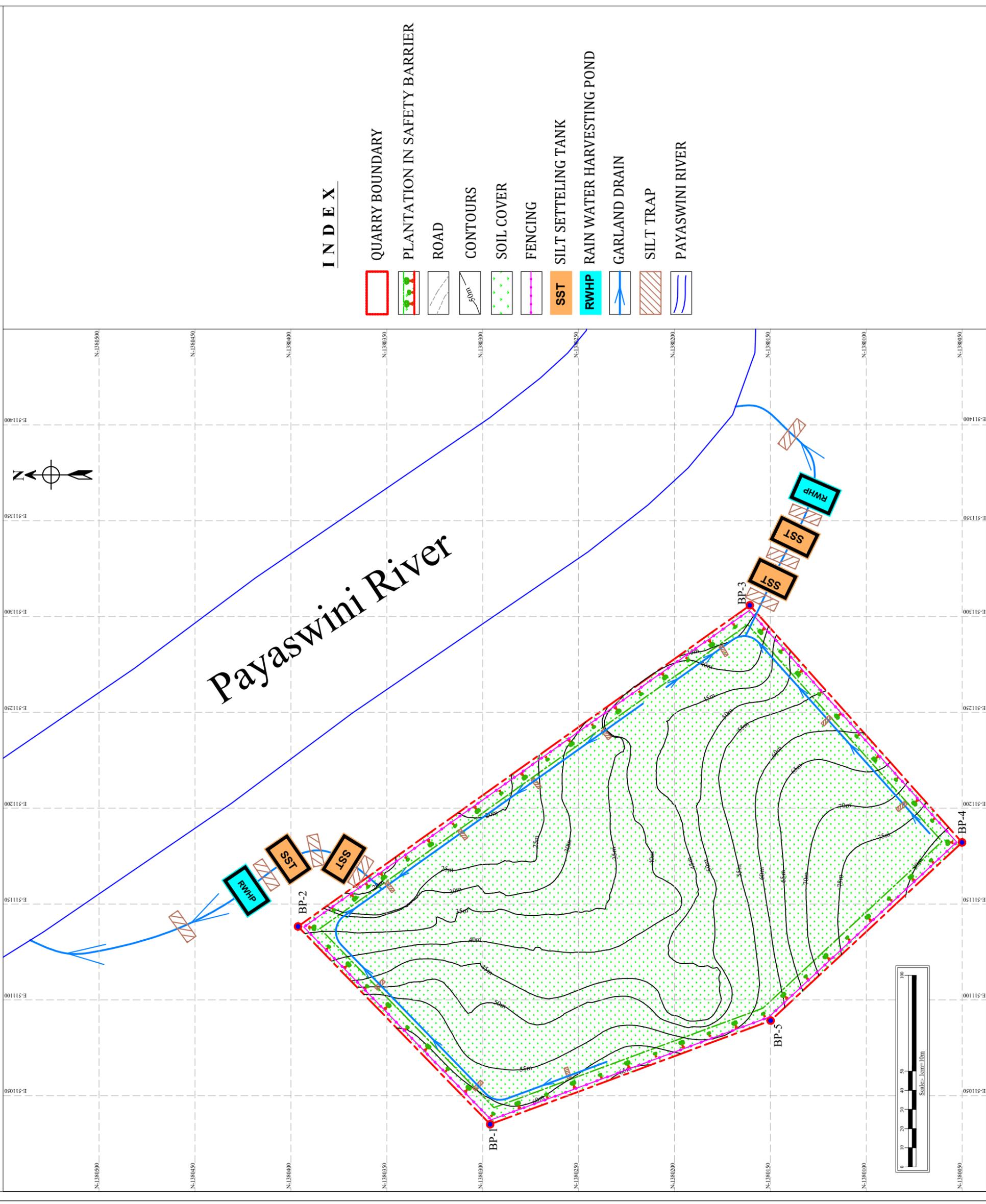
Additional to the SST's & RWHP sufficient silt traps shall be provided to control the silts flowing along with the surface run-off water. The water from the rainwater harvesting ponds shall be used for plantation & for dust suppression.

Periodical maintenance of Silt Traps, SST's & RWHP's will be done and will be periodically desilted especially before the monsoon season.

The modified drainage plan is attached as **Annexure – A**.



Drainage Plan-Minering Aggregates-4.7998Ha



I N D E X

-  QUARRY BOUNDARY
-  PLANTATION IN SAFETY BARRIER
-  ROAD
-  CONTOURS
-  SOIL COVER
-  FENCING
-  SILT SETTLING TANK
-  RAIN WATER HARVESTING POND
-  GARLAND DRAIN
-  SILT TRAP
-  PAYASWINI RIVER

ROAD DEVELOPMENT PLAN
for
GRANITE BUILDING STONE QUARRY
of
***M/s. MINERING AGGREGATES PRIVATE
LIMITED***

Extent : 4.7998 Ha.

Re-Sy. Bl. No. : 01

*Re-Sy. Nos. : 23/1 pt427, 23/1 pt426, 23/1
pt424 & 23/1 pt375.*

Village : Kolathur Village

Taluk : Kasaragod

District : Kasaragod

State : Kerala

A new road is proposed Near the boundary Pillar – 01 which connects the village road in the NW side of the proposed area. The length of the proposed road will be of 100meters and width of 8.0m will be maintained. An image showing the new access road to the proposed site is shown below;



Mitigation measures for the adverse impacts on the river and riverine ecology

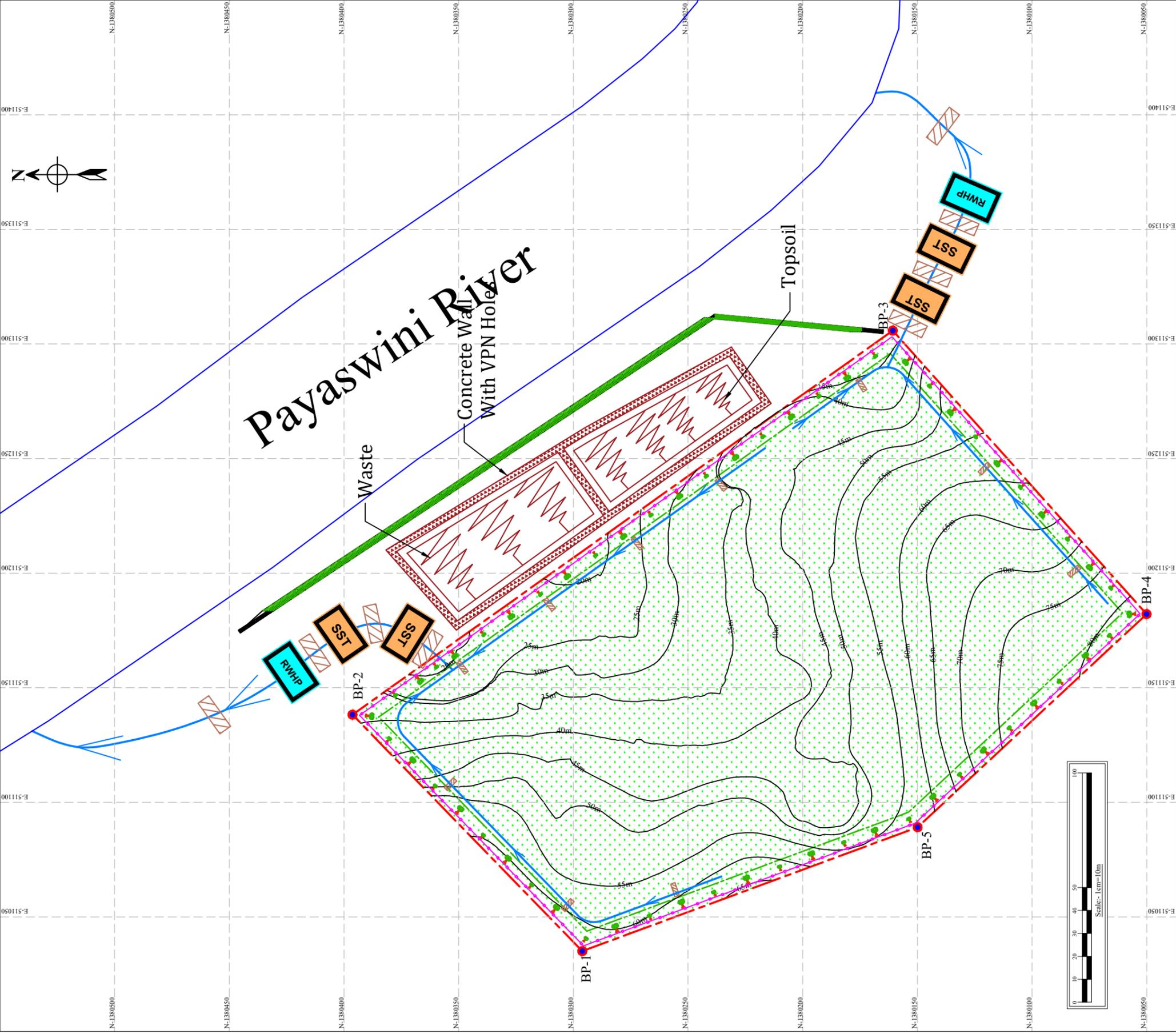
Granite Building Stone Quarry of M/s. Mining Aggregates Private Limited is located at Re-Sy Block No: 01, Re-Sy. Nos: 23/1 pt427, 23/1 pt426, 23/1 pt424 & 23/1 pt375, Kolathur Village, Kasargod Taluk, Kasargod District, Kerala State, India. There is a river flowing on the Eastern side of the proposed area at a distance of 65.9m. Considering nearness of the presence of river following mitigation measures shall be done;

- Water treatment will be generally carried out with Alum for Coagulation of any sediments in the silt settling ponds.
- One additional settling pond is proposed between the overflow from the first settling pond to the rainwater harvesting pond. Thus two settling ponds is envisaged for settlement of any sediments and only clear water will be directed to the rain water harvesting pond.
- Two sets of such arrangement are proposed to be constructed near BP2 & BP3 so that only clear water will overflow from the rainwater harvesting ponds to the natural water flow.
- Alum will be added at the beginning of the drains which will eventually mix with the flow where the Coagulation process takes place. Most of the clay or silt will be settled in the silt traps and silt settling tank. Additional Alum will be added in the Silt settling tank to enhance the settling.
- Silt settling tank will be periodically desilted.
- Additional silt traps shall be provided in all the drains
- Three labours will be deployed for maintenance of garland drains.
- RCC wall protection will be made to the dump to avoid any surface erosion.
- Benches will be formed with an height of 6.0m in OB/Topsoil dumps to maintain the stability & to avoid slope failures. Mostly the top soil excavated will be used for plantation purpose and waste generated will be used for miscellaneous works. Plantation will be done in OB/Topsoil dumps to enrich the stability.
- Addition to the wall, A green nets with 5.0m height will be constructed all along the proposed mine boundary adjacent to the river side to prevent the contamination of water from dust emitted from the mine workings.

- The quality of the water in the surrounding shall be monitored Pre-Monsoon & Post Monsoon to track any changes or contamination in the water quality.
- The detailed plan for mitigation measures of impacts on river is attached as Annexure –B.

I N D E X

-  QUARRY BOUNDARY
-  PLANTATION IN SAFETY BARRIER
-  ROAD
-  CONTOURS
-  SOIL COVER
-  FENCING
-  SST
-  RAIN WATER HARVESTING POND
-  GARLAND DRAIN
-  SILT TRAP
-  PAYASWINI RIVER
-  GREEN NET PROTECTION FOR DUST



**SLOPE STABILITY AND POSSIBILITY OF SOIL PIPING AROUND
THE PROPOSED QUARRY OF M/S MINERING
AGGREGATES PVT LTD IN KOLATHUR VILLAGE, KASARAGOD
TALUK, KASARAGOD DISTRICT**

WESTCON

DR.P.K.THAMPI, JOHN MATHAI AND DR.D.S.SURESHBABU

DECEMBER, 2024

REPORT ON SLOPE STABILITY AND POSSIBILITY OF SOIL PIPING AROUND THE PROPOSED QUARRY OF M/S MINERING AGGREGATES PVT LTD IN KOLATHUR VILLAGE, KASARAGOD TALUK, KASARAGOD DISTRICT

BACKGROUND

M/S Minering Aggregates Pvt. Ltd to operate an open pit granite rock quarry in an area of 4.7998 ha falling in Survey No 23/1- parts 375, 424, 426 and 427 of Kolathurvillage, Kasaragod taluk, Kasaragod district for which necessary clearances are sought from authorities. The quarry is planned to be operated with benches by semi-mechanised opencast method of mining. The Proponent with an intention to maintain all possible aspects of safety in the operational stage of the quarry approached Dr. P K. Thampi, Team Leader, WESTCON to carry out an evaluation of slope stability and possibility of soil piping within the proposed quarry and its adjoining area. Subsequently, a team comprising of Dr.P.K.Thampi, Scientific Advisor (Rtd), Centre for Earth Science Studies Trivandrum, Sri.John Mathai, Scientist G (Rtd), National Centre for Earth Science Studies Trivandrum and Dr. D S. Suresh Babu, Principal Scientist (Rtd), National Centre for Earth Science Studies Trivandrum, Govt of India visited the quarry and surrounding area on 04.10.2024 and collected information on the terrain parameters and causative factors that promotes slope instability. The possibility of soil piping in the given area was also looked into. The details of this study are given in this report.

GENERAL OBSERVATIONS OF THE QUARRY SITE AND SURROUNDINGS

The proposed quarry site is located in a remote area about 3.5 km north of Perladakkamor 5 km east of Thekkil bridge. The site is approachable through an all-weather road deviating to north from Perladakkam. The site falls on the northern slopes of a relatively flat laterite mesa. Payaswani river is seen further north of the site. Isolated flat topped hard crusted laterite table-land is a common landform in the midlands of Kasargod district. The crestal part of the mesa landform near the quarry site is almost flat reaching to an elevation of over 100 m. This area is covered mostly by hard duricrust. The flanks of the flat land show signs of dissection resulting in an undulating topography. The valley region without any definite orientation supports low order streams. The upper slopes of this dissected area are steeper than the lower slopes. The upper slopes are covered with a thin layer of pebbly laterite soil resting over the

mottled zone in laterite profile. The lower slopes are covered with a thicker soil cover, mostly gravelly clay loam. However, in deeply dissected and eroded area, exposures of hard rock are seen. The upper and lower slopes are mostly covered by rubber plantations while the crestal part supports cashew. Dwelling units are sparse around the quarry. The quarry area is located on the lower northeast facing slopes below 80 m elevation (Fig 1). An old quarry pit is seen in the central part of the proposed quarry site.



Fig 1: Google image of the proposed quarry site of M/S Minering (out lined in red colour). An old worked out pit is seen in the central part (arrow mark with red bordered by white colour). Payaswini river is seen to the north of the site. The white line adjacent to the quarry is the road that passes through the crestal part.

TERRAIN EVALUATION OF THE QUARRY SITE

The location of the proposed quarry site is given in Fig. 1. The lease area has a rectangular shape. As per the Survey of India topographic sheet, the elevation of the quarry site lies between 80 m and 40 m amsl. The general slope of the site is towards northeast. Central part is slightly depressed forming an imperfect hollow region while the flanks are elevated. The

slope varies from 12° - 21° . Foliated Charnockite and its migmatitic variants form the dominant rock type in the site. NW-SE trending fracture planes with sub-vertical dips are observed in the old quarry pit. Closely spaced fracture planes or shear zones are not seen in the quarry pit or in the out crops. Sub-horizontal release joints with gentle slope to the east are also noted. The degree of weathering is high in the upper most crestal part of the laterite mesa. In the quarry lease area located in the lower slopes, the weathered zone has been removed by erosion exposing rock outcrops. Overburden is mostly weathered zone overlain by a pebbly laterite soil bed of variable thickness. The thickness of overburden varies from point to point and is less than 2 m. Rocky outcrops are exposed but not in continuous sections. Well defined drainage channels are absent and the surface runoff is mostly as overland flow in the elevated upper part of the quarry area. On the lower part of the site a slight depression is seen. In this segment coinciding with the central part of the broad hollow region, seepage of water with slight flow was observed. The approach road to the quarry is presently laterite paved. This road will be developed as the main haulage of the quarry with side drains that channelize storm water. The proposed quarry site and its surroundings support rubber plantations. The hollow shaped depression with seepage of water in the rainy season supports arecanut. Man made modifications to the area is limited to the small quarry pit close to the central part. Steep road cuttings are not observed in the vicinity of the proposed quarry.

SLOPE STABILITY OF THE QUARRY SITE

RELEVANT LANDSLIDE SUSCEPTIBILITY MAP

Evaluation of the terrain in terms of its landform, slope, nature of overburden, geology, drainage, vegetation cover etc. is essential to elucidate the natural stability of a region and to determine the possibility of landslides. Based on the regional evaluation of the region, landslide susceptibility maps have been prepared. The extract of the landslide susceptibility map of Ksaragod district relevant to Kolathur village is given in Fig.2.

The entire area falls within the midland region characterized by flat topped laterite hills, dissected slopes and flat bottom valleys. As such red zone is absent in the mid land region. In Kolathur village also red zone or areas of high landslide susceptibility are absent. In the entire Kolathur village zones of moderate landslide susceptibility are limited to few patches as shown in Fig.2. The landform of the area where quarry site is located comprise of nearly flat topped laterite mesa with northeast sloping side slopes ending in the flood plain of Payaswani river. The mesa region by virtue of its gently undulating nature and hard duricrust in the

crestal part is considered to be stable devoid of any landslide occurrences. The maximum inclination of the dissected upper slopes is 35% or 20° falling in the low landslide susceptible zone. In this area other causative parameters like degraded vegetation, positive drainage and presence of planes of discontinuity are not observed to make it a landslide prone zone. Thus, regional evaluation of the region indicates that the quarry site is located within the safe zone (Fig.2).

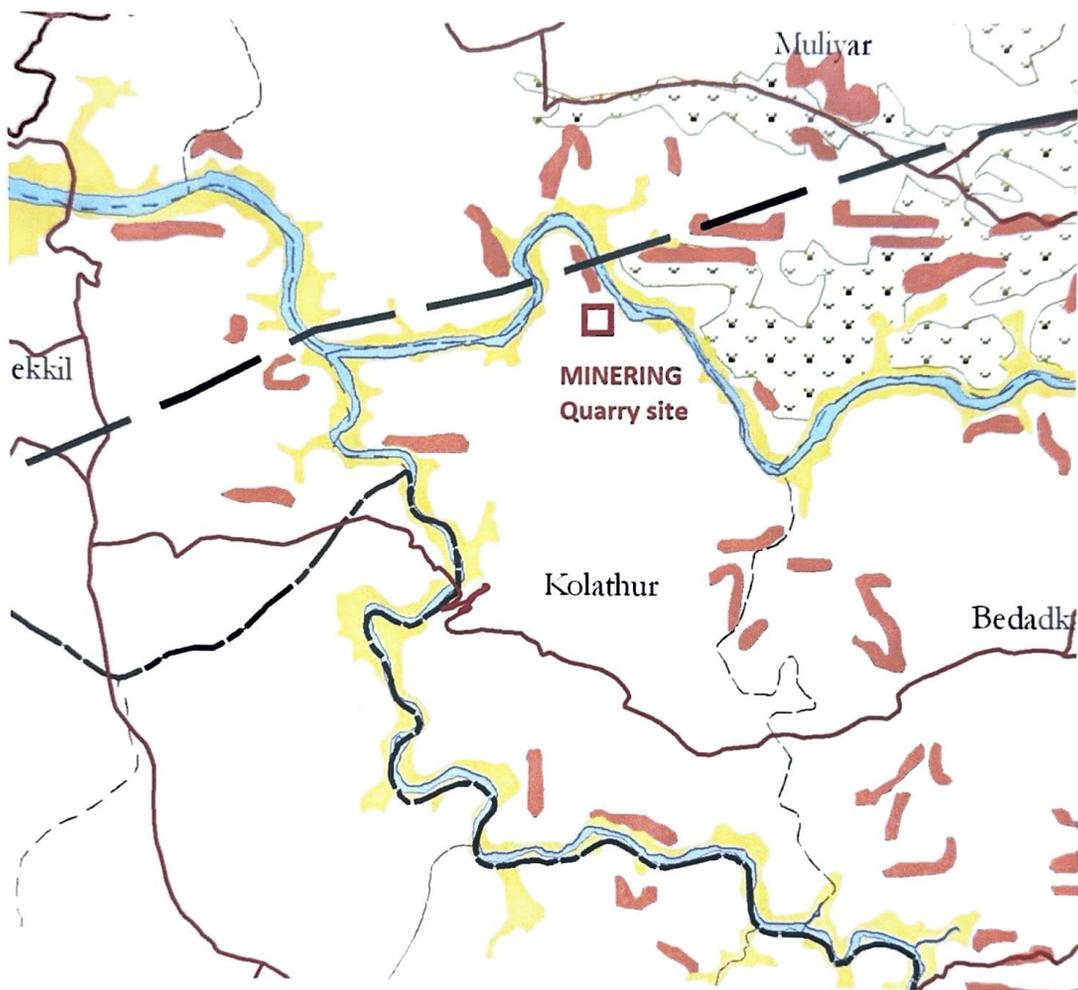


Figure 2: In Kolathur village isolated patches with steeper slopes are shown falling in the moderate landslide susceptibility zone. High landslide susceptibility zones are absent in this village. The quarry site is located in the lower slope mostly within the safe area.

NATURE OF SLOPE FAILURES IN KERALA AND MACRO ZONATION

In Kerala, debris flow or *Urulpottal* is the dominant type of landslide where in the overburden in a water saturated condition flows down the slope under the influence of

gravity. Earth slumps/slides and rock slides are much less frequent to be of concern. The red zone given in the District level Landslide hazard zonation maps is from macro-zonation attempted on 1:50,000 scale following the methodology adopted by BIS (assigning weights to each landslide hazard evaluation factor). In this study the entire area is divided into 250 x 250 m grids and the assigned weights of individual parameters for each grid are summed up. Based on the total value, each grid area is categorized into different zones of stability. It means that for each grid of 250 x 250 m on ground or 6.25 ha area, only one value is considered. The scale of mapping does not allow sampling at closer interval than this value. Since the quarry site is less than 6.25 ha, taking a decision on the instability of this site based on the product of macro-zonation is incorrect. In addition, some of the parameters considered for macro-zonation are based on secondary data and inference based on remote sensing products.

MICROZONATION OF QUARRY SITE

To evaluate the slope stability status of quarry site, micro-zonation based on detailed ground data collection on all causative parameters is required. Micro-zonation is often carried out in cadastral scale of around 1:5000. A rapid semi quantitative micro-zonation, based on dominance of causative factors at micro-level, is carried out in this area to understand the slope stability of this quarry site.

CAUSATIVE PARAMETERS EVALUATED

Slope

The position of the site in the overall landform, the magnitude of slope and its length is a dominant factor. The quarry site falls in the lower slope with less than 20° slope. The elevation difference between the upper and lower part of the quarry is just 50 m only. The elevation in the crestal part of laterite mesa where the sloping section starts is about 100 m amsl and ends at about 40 m amsl where the gently sloping lower slope begins. Thus, the continuity of the slope in the profile is limited to 60 m of slope length only. Considering the slope of less than 35% and slope length of 60 m only, slope instability problems are unlikely in this quarry site.

Type and thickness of overburden

Estimation of the thickness of the overburden and its type are significant in assessing the landslide potential of a given area. In most cases of debris flows, the thick loose material is dislodged while the underlying hard rock is left intact. Over burden thickness at the site is less than 2 m. The presence of rocky out crops in the site further reduces the average thickness of over burden. The nature of over burden is boulder rich pebbly soil with very low clay content. This adds to the capacity of the surface material to drain out water without saturating the over burden. In times of intense rains, the material is unlikely to fail as higher pore water pressure buildup is unlikely. More over this overburden material will be removed in the development stage of the quarry reducing any further chance of slope failure.

Geology and structure

The parent rock is Charnockite that is more massive in nature. The degree of dissection is high resulting in the removal of the weathered zone in this area. The rock has sparsely spaced fractures only. The orientation of these fractures trend across the slope and not parallel to it to aid failure. The presence of the rock at shallow depth adds to the stability of the region. Closely spaced fracture zones or shear zones that can aid in slope failure are not observed in the old quarry pit

Drainage

Drainage is another important parameter. There are no well-defined drainage channels in the site that carry storm water to the lower slopes. The storm water mostly flows as overland flow in the upper slopes. In the central part of the lower slope, a slight hollow part is seen with seepage and flow during the monsoon. However, considering the presence of rock outcrops in this section, possibility of saturating loose material is remote. In order to enhance the stability of the quarry faces and to reduce entry of water into the working area, garland drains are to be provided to the proposed quarry which is mandatory. In addition, catch water drains are also to be provided on the lower part to regulate the flow of storm water from the working pit.

Vegetation cover

The quarry area and its surroundings are presently covered with rubber trees. The tree cover within the proposed quarry pit will be removed prior to the operational stage of the quarry while the tree cover in the surroundings will be maintained. The buffer zone around the pit

will be provided with additional vegetation cover. The additional vegetation cover provided is expected to enhance the stability of the buffer zone. The overburden and other loose material will be removed before commencement of mining operation

Stormwater channels

The entry of storm water into the quarry pit from the upper elevations and lateral sides will be prevented by providing garland drains. The side walls of the drains in the upper area will be strengthened with proper reinforcement to support the slope and to prevent any kind of slumping. The seepage seen in the lower slope will be drained out through well-defined channels.

SUMMATION ON SLOPE STABILITY

The hard rock like Charnockite with steep cuttings is often stable unless there are closely spaced planes of discontinuity or shear zones traversing the site. Since the hard rock quarry follows a top to bottom approach with benches and it maintains an overall slope of 45 degrees, slope stability problems within the site are remote. Further, channelizing the water through well-defined channels will prevent saturation of the surrounding loose material. The clarified water is led into the diversion channel without entering the quarry site.

The site by virtue of its location in the midland region does not pose any slope instability. Overall evaluation of the site as given above taking into consideration factors like landform, slope, geology and structure, nature of overburden, drainage channel layout and provision of vegetation in the buffer zone indicate that quarrying in the site is unlikely to initiate slope instability. Reinforced side walls of garland drains on the upper slope will add to the stability of the region.

POSSIBILITY OF SOIL PIPING IN THE AREA

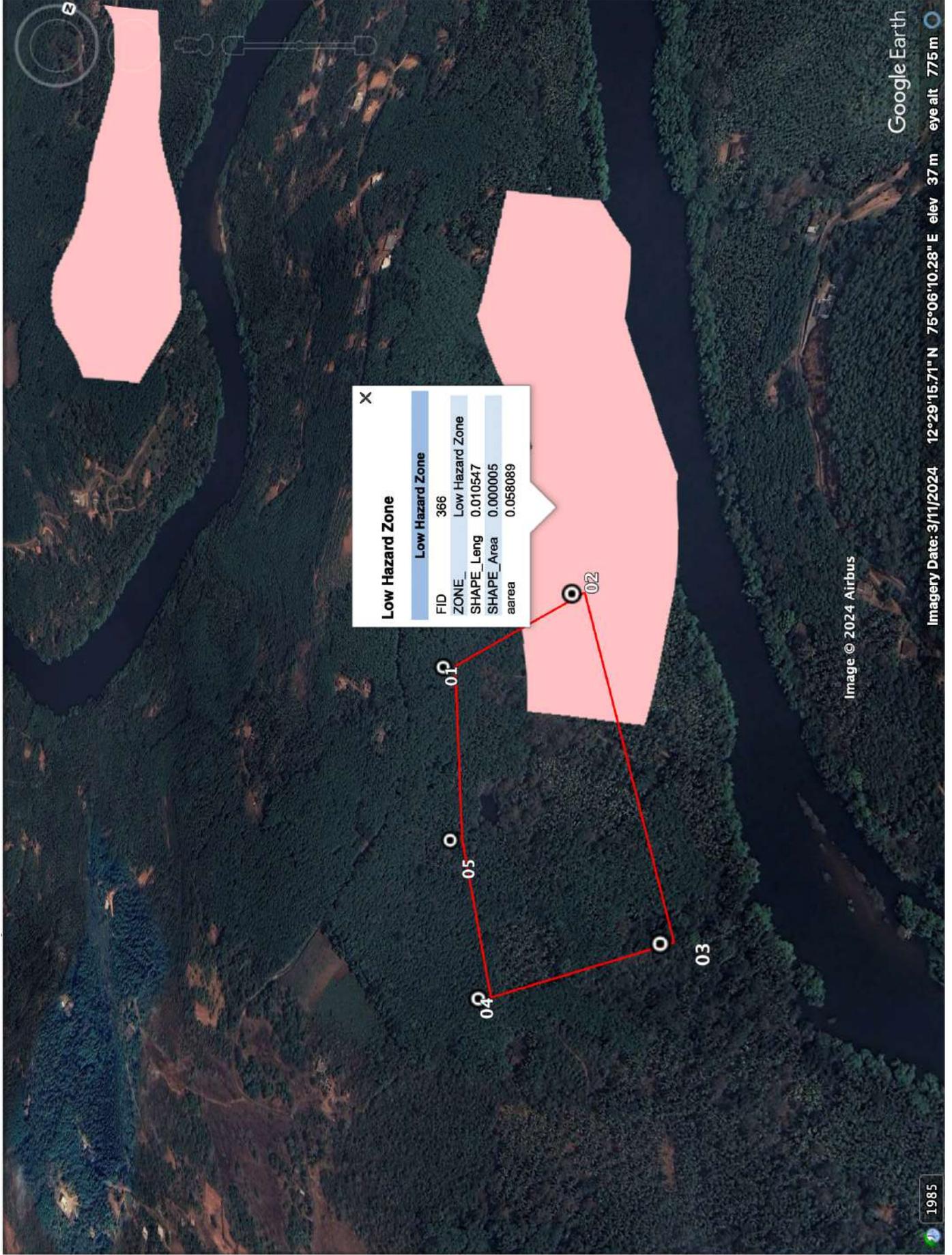
Normally soil piping is seen in the interface of hard basement with loose overburden. They are commonly seen in the contact region of mid-land and high land area. Soil piping results in the formation of pits or depressions in the upper slopes from where material has been removed along underground pipes through sub-surface movement of water. The exit points of such pipes can be located in the foot slopes or in the valleys having a cave-like appearance. The inlet point and the exit point are often separated by hundreds of meters. Good quantity of

muddy material would also be seen near these exit points as they are transported through the soil pipes.

A critical examination of the sloping surfaces near to the proposed quarry for entry /exit points does not indicate the presence of soil pipes in the area. The side slopes on the upper and lower level have only a thin layer of pebbly soil and overburden. Sporadic exposures of rocky outcrops are common. The depth and extent of overburden in the area is limited to 2 m. Piping is unlikely in segments where weathering is limited to the surface and exposes rocky outcrops. The source point of the seepage in the hollow portion on the lower slope was examined. Cave like opening was not observed. Hence, the possibility of soil piping in this area can be ruled out.


Dr. P.K. THAMPI
Team Leader
WATER, ENVIRONMENTAL SCIENCES &
TECHNOLOGY CONSULTANTS
(WESTCON)
MLR 41, Mangalam Lane, Saathamangalam
Thiruvananthapuram - 695 010





**BEFORE THE HON'BLE NATIONAL
GREEN TRIBUNAL, SOUTHERN ZONE
BENCH AT CHENNAI**

APPEAL NO. 60 OF 2024 (SZ)

Minering Aggregates Private Limited
...Appellant

Versus

SEIAA and Anr.
...Respondents

**ANNEXURES FILED ALONG WITH
REJOINDER STATEMENT ON BEHALF
OF THE APPELLANT**

**M/s. Tanushree Arvind (MS 4116/2018)
Simran Srinivasan (MS 673/2020)
COUNSEL FOR APPELLANT**

Ph: +91 7305057770 / +91 8939904257

Email: tanushreearvind15@gmail.com