

MINUTES (approved) OF THE 10TH MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC) KERALA, HELD ON 26TH AND 27TH NOVEMBER, 2012 AT HARITHASREE HALL, DEPARTMENT OF ENVIRONMENT AND CLIMATE CHANGE, THIRUVANANTHAPURAM

The tenth meeting of SEAC Kerala was held on 26th and 27th November 2012 at Harithasree Hall, Department of Environment and Climate Change, Thiruvananthapuram. Representatives of project proponents/consultants attended the meeting at relevant durations. The agenda included the evaluation of sixteen new projects including thirteen quarry proposals and three building proposals. The meeting started at 9.30 am on 26th and 27th and the following members of SEAC Kerala were present in the meeting:

1. Dr. N.G.K. Pillai - Chairman, SEAC
ICAR Emeritus Scientist &
Former Director CMFRI
2. Dr. Oommen V. Oommen - Vice-Chairman, SEAC
Chairman, Kerala State Biodiversity Board &
CSIR Emeritus Scientist
3. Prof. (Dr.) K. Sajan - Member, SEAC
4. Dr. P.S. Harikumar - Member, SEAC
5. Dr. C.N. Mohanan - Member, SEAC
6. Dr. E.J. Joseph - Member, SEAC
7. Dr. E.A. Jayson - Member, SEAC
8. Dr. V. Anitha - Member, SEAC
9. Dr. Khaleel Chovva - Member, SEAC
10. Sri. John Mathai - Member, SEAC
11. Sri. Eapen Varughese - Member, SEAC
12. Sri. P. Sreekantan Nair - Secretary, SEAC
Director,
Department of Environment & Climate Change

Chairman, SEAC welcomed all the participants. In his opening remarks he briefed the current status of proposals received by SEIAA. The Committee held detailed discussions on the communication received by SEIAA Kerala from the National Green Tribunal, New Delhi, directing to adhere to the Western Ghats Ecology Expert Panel (WGEEP) report if it has not been varied till date, while taking decisions on considering the proposals for environmental clearance coming for consideration before them. Hence, under the light of the direction from the Tribunal it was decided that the proposals of those areas demarcated as

Eco-Sensitive Zone -1 (ESZ-1) shall not be recommended for Environmental Clearance for the time being and shall defer the proposals after detailed presentations followed by discussions. Since the WGEEP report says that the boundaries of Taluks are likely to change, it was decided to finalize the areas of ESZ-1 based on the 9x9 grids considering longitude and latitudes put forward in the WGEEP report. It was also further decided to inform all the proponents whose project site comes under the purview of WGEEP report to approach SEAC for environmental clearance at a later stage after the finalization of the report specifically demarcating various ESZs by the MoEF, Government of India.

In addition to all these, the following General Conditions are also stipulated to be followed by all project proponents taking up mining activities:

1. Barbed wire fencing around the mining area shall be provided.
2. Warning alarms indicating the time of blasting which has to be done at specific intervals to be provided.
3. Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
4. Suitable noise barriers to contain noise shall be adopted.
5. Assurance in the form of affidavit that eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
6. Assurance in the form of affidavit that only a maximum of 10 percent of the total mined area shall be retained as water body, which should be lined properly, provided with protective wall to prevent accidents.
7. Garland drains to be provided in the lower slopes around the core area to channelise storm water.
8. Debris/ silt traps to be provided to prevent entry of dust and quarry wastes entering the main streams.

Thereafter, regular agenda items were taken up for deliberations:

Item No. 10.01 Confirmation of the **Minutes of the 9th meeting of State Level Expert Appraisal Committee (SEAC) Kerala, held on 3rd November 2012 at Harithasree Hall, Department of Environment and Climate Change, Thiruvananthapuram**

Confirmed.

Item No. 10.02 **Action taken report on the decisions of the 9th SEAC meeting**

The Committee noted the item.

Item No. 10.03 **Application for environmental clearance for the proposed quarry project in Survey Nos. 396/1-A & 396/1-B2 at Varapetty Village, Varapetty Panchayath, Kothamangalam Taluk, Ernakulam District, Kerala by M/s Parackal Granite Kerala Pvt. Ltd. (File No. 39/SEIAA/KL/7083/2012)**

A brief description of the project was presented by the project proponent. The proposed project site falls within 10°00' N and 76°38' E. The total land area in the name of

the present owner is 6.5 acres. The proponent informed that out of the total area owned by him, **there is an old quarry which is not in operation for the past ten years adjacent to the quarry site where mining is proposed. Hence the Committee insisted for eco-restoration of the previously mined area to be done simultaneously with initiating the present mining activities.** The Committee pointed out the discrepancies in the proposal submitted with regard to the total water requirements, quantity of sewage generated, GPS readings in google image regarding latitude and longitude of the proposed quarry site, which was cleared by the proponent during the presentation. The Committee wanted the proponent to be more serious and cautious and also to meticulously prepare proposals for presentation while placing before an evaluation Committee. In the present proposal **the proponent has given a mineable depth of 55 m below ground level as they have done in the old abandoned quarry. But the Committee strongly defended this and insisted to restrict the mining depth to a maximum of 40 m or to the floor level of nearby stream, whichever is less.** Otherwise water from the adjacent valleys and streams will find its way through fractures to the quarry pit inundating it causing water scarcity to the adjacent plots. The proponent was asked regarding the thickness of **overburden** and the quantity of overburden other than top soil and **suggested that this material has to be kept aside for refilling the closed mine.** When the proponent stated that the topsoil removed will be dumped in one place and shall be later utilized for future land reclamation, the Committee suggested for filling the old quarry instead of dumping as the adjacent quarries can be leveled by overburden waste wherein only one pit in the old quarry is deep whereas others are shallow. The proponent was reminded of adopting reclamation measures that goes well with sustainable development. The proponent was asked regarding the blasting techniques used and mitigatory measures proposed to reduce the impact of the same. To this end the proponent stated that the zero detonators used (earlier where a number of pits are blasted at the same time) are replaced by delayed electrical detonator with a blasting interval of 0.25 millisecond which will eventually reduce the impact of blasting. When asked about the crusher unit where this excavated material is being processed, the proponent stated that it is located within the property but outside the lease area. But the Committee was of the opinion that since crusher is also an integral part of this project it shall be given as an interlinked project of the proposed quarry and details regarding the same need be provided accordingly.

The Committee opined that the present project area falls in an area that is being quarried actively and a north-east oriented hill ridge is being stripped for the rock and aggregates. Hence the Committee was of the opinion that since a large area belong to the proponent, it can be treated as one unit taking the old quarry and proposed new one together, so that a long term planning can be made for exploitation of rock without disturbing virgin areas. Regarding the contour plan submitted by the proponent, the Committee was of the opinion that the topography is not clear as the contour values are not legible and not to scale which is given as 1:100 which is technically incorrect. The slope aspect is not taken in the mine plan or section and the benches at the top level cannot be shown as straight lines if topography is considered. The presence of a road through the lease area warranted provision for a safe buffer zone on either side. When the proponent was asked regarding this they clarified this as their private road. The Committee was of the opinion that **considering the scarcity of land in our state it is undesirable to leave the mine pit for collection of rainwater, as stated in the end land use plan and hence suggested to refill the area with stacked soil and overburden, raise plantations or green belt and use the land for other gainful purposes.**

Considering all the above, the proposal is RECOMMENDED for environmental clearance. In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions:

1. Assurance in the form of affidavit that the overburden thickness shall be managed within the site and the old quarries shall be reclaimed and restored appropriately.
2. Assurance in the form of affidavit that the mining depth shall be restricted to a maximum of 40 m or to the floor of the nearby stream whichever is less.
3. Assurance in the form of affidavit that the height and width of benches shall not exceed 5 m.
4. Assurance that mats may be provided to reduce fly rock blast and noise isolation shall be provided while fragmenting rocks with machinery, wherever necessary.
5. Landscape plan with index of species of plants to be planted to be provided.
6. Consent should have been obtained from the people inhabiting the area 100 m around the edge of the core zone of the project area for conducting quarrying activities.
7. A revised contour plan shall be provided and the quantity of overburden to be given to the Authority before initiating any activities.
8. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided to the Authority before initiating any activity.
9. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.04

Application for environmental clearance for the proposed quarry project in Survey No. 65/1 at Kumily Village, Kumily Panchayath, Peerumade Taluk, Idukki District, Kerala by M/s Kizhakethalackal Rocks (File No. 40/SEIAA/KL/7084/2012)

Before the presentation of the proposal by the project proponent the Committee held detailed discussions on **the proposed project site as it falls within 10 kms of state boundary between Kerala and Tamil Nadu, Periyar Wildlife Sanctuary. The proposed area comes under the Eco Sensitive Zone 1(ESZ 1) of WGEEP report.** The proponent was then allowed to make a presentation of their proposal. The proposed project site falls within 9°38'N and 77°08' E. **The Committee was of the opinion that since the elevation difference of the site is more than 1000 m, it is definitely eco-sensitive.** It was pointed out by the proponent that although the project site as evident from the google image indicated thick forest vegetation it is actually rubber plantation. **The proponent was asked to revise the local geology given in the write up as it varied much from geology of the proposed site.** The proponent has not provided practical measures to contain noise during blasting operation. The proponent was of the opinion that since they adopt delayed electrical controlled blasting, the impact is very less compared to traditional blasting. Since the proponent has not suggested specific plans towards Corporate Social Responsibility the Committee suggested conducting free medical check ups for people around 300 m around the project site who are willing for the same as part of medical camps which can be conducted once in a year. The Committee also asked whether the existing roads are capable of withstanding 20 T trucks transporting the excavated material. To this end the proponent

stated that the plying of trucks is within the campus only for which the private road maintained by them is being used. Even after the clarification from the proponent regarding the queries raised by SEAC, **the Committee was concerned about the site coming under the ESZ-1 of WGEEP report. With this in view, the Committee decided to DEFER the proposal for the time being. It was further decided to inform the proponent to approach SEAC for environmental clearance at a later stage, after the finalization of the WGEEP report specifically demarcating various ESZs, if required, in the light of the National Green Tribunal orders.** In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions:

1. Revise local geology of the project site.
2. Provide details regarding depth up to which the geological resource is found.
3. Consent from the people inhabiting the area 100 m around the edge of the core zone of the project area for conducting quarrying activities.
4. Landscape plan with index of species of plants to be planted to be provided.
5. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided to SEAC before initiating any activity.
6. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.05 Application for environmental clearance for the proposed Institute of Medical Sciences and Multi-Speciality Hospital Project in Survey Nos. 225/2, 225/3-1, 225/2/2, 226/5/1/2, 226/5/1/3, 226/5/1/4, 226/5/1/1, 226/5/2, 189/1-2, 189/2, 224/4, 224/5, 397/1-2 and 397/1-3 at Koovappady Village and Panchayath, Kunnathunadu Taluk, Ernakulam District, Kerala by M/s Sree Narayana Gurukulam Charitable Trust (File No. 54/SEIAA/KL/7582/2012)

The hospital complex is planned in a remote area (abandoned quarry and agricultural land) where Periyar valley irrigation canal forms the western boundary. The project proponent made a brief description of the project. The proponent stated that the proposed project site is an abandoned quarry land and hence no endemic plant species is found. **The Committee suggested to select local plant species which suits the locality for green area development as the project site lies in a rural remote area.** SEAC found that the plan submitted by the project proponent to the Office of the Chief Town Planner is different from the one submitted before SEAC as the former plan showed rain water harvesting pond and old quarry in the map submitted unlike the latter. Hence, the Committee suggested the proponent to stick on to one plan and proceed further. To this end the proponent stated that what they have submitted to the Office of the Chief Town Planner is only for seeking approval to the 1st phase of the project of 50000 m² built up area which created confusion and now they have applied for the whole project altogether with a revised plan which is under consideration of CTP. The proponent has also submitted the master plan for all phases before SEAC.

The project site has a rain water storage pond of 1,37,660 KL capacity (during post monsoon period) within the campus. But this pond was left abandoned for years and

at present the water from this pond is not used for any purpose and no storm water is directed to this pond. But the **Committee was of the opinion that this pond can be used as a potential source of water provided there shall be other sources of water also as due to evaporation losses this amount of storage will not be sufficient to cater the entire needs and the storage cannot be maintained throughout the year.** But the proponent clarified that they have also proposed roof water storage as the bore wells give a poor yield and the pond of the abandoned quarry is not dependable. When asked about the details of water level and depth of the pond the proponent stated that the existing pond is 30 m deep and they are planning to direct storm water to this pond. But the storm water drainage was not clear from the drawings and clarification was sought regarding the channelising of open area rain water. Proper fencing has been provided around the pond that spreads in 3 acres of land. **The Committee suggested for proper landscaping with suitable vegetation / medicinal plants around the pond.** Regarding the entry and exit points of the proposed project site the proponent stated that an 8 m wide road on northern part is the main access to the project site and that they have left 5 m from the project site without any construction for future expansion. The Committee found this approach road to the project site which extends to 1.5 km is a narrow road leading from Aimuri, partly by the side of the canal and partly through populated area and this road has to negotiate two narrow culverts on the canal. Hence, **the Committee was of the opinion that the present width of the road limits the height of the building and unless the approach road is widened to at least 12 m, it will pose great traffic problems and may hinder the free movement of high speed ambulances as far as the hospital project is considered. It was suggested to construct a fly over or to provide an underpass to avoid traffic congestion in the area.** It was found that a 3.5 m wide public road passing between the east and west side of project site separates it into two and parking space for the proposed hospital was provided on the other side of the road, a little away from the proposed hospital. The proponent has made provisions for covered car parking. The Committee suggested shifting the parking space to near the hospital. The Committee raised concern on the HT line in the western side of the project site which is a main power line that divides the plot into two with two towers in the western part and suggested for protective barriers around the tower line. The Committee pointed out that the perspective plan and conceptual plan differed in many aspects. **The width of internal roads were not shown in conceptual plan and the Committee suggested for an at least 7.5 m wide internal motorable road to facilitate free movement of ambulances and other vehicles.** But the proponent explained that perspective plan is from an artistic angle rather than revealing the technical aspects.

As per the water quality reports provided by the proponent it was found that all the parameters except pH and iron were within the standard limits. But the Committee was not convinced with the reports submitted and hence directed the proponent to provide fresh water quality reports of the pond and bore well in the site. The proponent was asked why they have not mentioned anything about the hostel facilities provided to students in the proposal. The proponent explained that the hostel facilities are provided 5 km away from the project site and does not form part of this present proposal.

The proposal was DEFERRED for SITE INSPECTION and the Committee resolved to request the applicant to furnish the following details before SEAC for further processing.

1. Details on the width and height of the building
2. Water quality report of the pond and bore well in the project site
3. Detailed storm water management plan connecting the pond present in the project site
4. Copy of ownership details for the Sy. Nos. 189/1-2, 397/1-2 and 397/1-3 to be provided.
5. Revised conceptual plan showing HT tower line, solid waste storage area, width of internal roads and tube wells.
6. Landscape plan with clearly marked index of tree species to be planted.
7. Assurance that the width of the approach road shall be widened at least by 12 m.
8. Assurance that HT towers shall be provided with protective barriers.
9. Assurance that sufficient safe buffer distance shall be provided on either side of the main high tension power line and critical facilities shall not be placed below it.

Item No. 10.06 **Application for environmental clearance for the proposed quarry project in Survey Nos. 80/1A2, 80/1A17, 80/1A18 & 79/2 at Arakuzha Village, Arakuzha Panchayath, Muvattupuzha Taluk, Ernakulam District, Kerala by M/s Hanna Rock Products Pvt. Ltd. (File No. 42/SEIAA/KL/7159/2012)**

The project proponent made a brief description of the project. The proposed project site falls within 9°55' N and 76°34' E. The Committee raised concern on the environmental quality reports submitted by the proponent as all the reports for different projects showed more or less the same values. Hence the Committee asked the proponent regarding the input parameters taken into consideration while assessing noise quality. To this end the proponent answered that 1000 m distance is taken into account to calculate the noise generated and that air and noise analysis has been carried out in locations at the site to the nearest habitation and where active quarrying is going on. **The Committee pointed out that the local geology of the project site written in the proposal is incorrect and hence suggested to rewrite it. The Committee also raised concern on the reclamation proposal suggested by the proponent as they are planning for reclamation of only 6.5 percent of the total mined area when the area has a capability of 85 percent reclamation. The Committee also suggested for a modification in the advancement of active quarry face as a top to bottom approach is needed and the benches need not be oriented in straight line as it can follow the topography.** The proponent has not provided the quantity of overburden and the depth up to which geological reserves are found. The project proponent assured that they shall submit a revised mining plan taking into consideration effective plans for maximum reclamation. **The Committee also pointed out the wrong practice of leaving the mined out pit as such on the plea of collecting rain water and thus calling it a water body. Regarding this, the Committee was of the opinion that the effective water availability after evaporation losses in these storage areas will be considerably less and suggested the proponent to go in for a proper storm water management plan.**

Considering the above, the proposal is RECOMMENDED for environmental clearance. In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions:

1. Local geology to be rewritten with major rock types, associated rocks, orientation of foliation and major joints.
2. Quantity of overburden and the depth up to which geological reserves are found to be estimated.

3. Landscape plan with index of species of plants to be planted to be provided.
4. A revised mining plan providing effective plans for maximum reclamation of mined area.
5. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided to SEAC before initiating any activity.
6. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.07 **Application for environmental clearance for the proposed quarry project in Survey No. 1411 at Kanichar Village, Kanichar Panchayath, Thalassery Taluk, Kannur District, Kerala by M/s New Bharat Stone Crusher & Hollow Bricks Industries (File No. 43/SEIAA/KL/7163/2012)**

A brief description of the project was made by the project proponent. The proposed project site falls within 11°51' N and 75°45' E. **The first and foremost thing that raised the SEAC's concern in the presentation was the locational error of project site in the google image which created confusion regarding the actual location of the proposed project site. SEAC also found that the western side of the project site is exposed to extensive quarrying activities which are being done in an unscientific way as is evident from the photographs provided. The Committee was very much apprehensive about the haphazardous method of mining followed and the improper mining plan.** The proponent stated that the quarrying activities is going on in the site for the past 6-7 years and about 1,20,000 MT of material has been removed from there so far. Hence **the Committee strongly insisted on a suitable mine plan as the quarry at present lacks a master plan.**

Considering the above, the proposal is RECOMMENDED for environmental clearance. In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions:

1. A revised mining plan shall be submitted to the Authority before initiating any activities.
2. Landscape plan with index of species of plants to be planted to be provided.
3. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided to the Authority before initiating any activity.
4. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.08 **Application for environmental clearance for the proposed quarry project in Survey No. 146/2 at Velliyamattam Village, Kudayathoor Panchayath, Thodupuzha Taluk, Idukki District, Kerala by M/s Puliyananickal Granites (File No. 44/SEIAA/KL/7164/2012)**

The project proponent made a brief description of the project. The proposed project site falls within 9°49'N and 76°48'E. The project site is at a distance of 4 km (aerial distance) from the reserve forest and 9 km from Kulamavu dam (by road). Adjacent areas of the project site are patta land and rubber plantations are seen all around. The Committee found that the

map of geological reserves provided by the proponent is incorrect. When asked regarding the flat terrain of the proposed quarrying area as seen from the photographs provided the proponent clarified that the mining activities are proposed on the top of the flat portion of a steeply sloping hill. **The Committee was of the opinion that landslide can be anticipated in the proposed site. Moreover, the Committee suggested that water falling from the small streams in the hill top to the adjacent plots has to be addressed.** To this end the proponent stated that this can be done by channelizing the water to the void area. The Committee found that in the area survey plan provided by the proponent the field number is given as 146/2 which is the survey number of the proposed project site whereas the survey number mentioned in the area survey plan for which approval is given for quarrying activities is 142/2. Hence the Committee directed the proponent to get it rectified from the Tahsildar.

Considering the above, the proposal is DEFERRED for SITE INSPECTION. In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions for further processing:

1. Copy of partnership deed attested by notary to be submitted to SEAC.
2. Proper storm water management plans to be submitted to the Authority before initiating any work.
3. Landscape plan with index of species of plants to be planted to be provided to SEIAA before initiating any activity.
4. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided to the Authority before initiating any activity.
5. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.09 Application for environmental clearance for the proposed quarry project in Survey No. 283 at Mazhuvanoor Village, Mazhuvanoor Panchayath and Sy. Nos. 284/1-2, 284/1-3, Arkapady Village, Vengola Panchayat, Kunnathunadu Taluk, Ernakulam District, Kerala by M/s Cochin Granites Pulickal Associates (File No. 45/SEIAA/KL/7166/2012)

The project proponent made a brief description of the project. The proposed project site falls within 10°02'N and 76°28'E. **The Committee suggested for a location specific EMP and biodiversity listing of flora and fauna which the proponent has not provided in the proposal. The proponent has also not provided the land use break up of mine lease area and the details of area to be mined in that.** To this end the proponent stated that there is a pond formed out of the pit area of the already existing mine in the proposed mine area and that there is no water in the pond at present. The water requirement for the manufacture of M-Sand will be met from the storm water collected in this pond (having a capacity to store 45000 KL) and also from the bore well. The proponent also stated that the void area shall also be used as a pond. As stated by the proponent there is a house at a distance of 290 m from the mining area and at present mining activities are going on in the adjacent areas. The M-sand washings are collected in separate series of settling tanks which is a separate unit from this pond.

Considering the above, the proposal is RECOMMENDED for environmental clearance. In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions:

1. Copy of partnership deed attested by notary to be provided.
2. A location specific EMP and biodiversity listing of flora and fauna shall be submitted before initiating any activities.
3. Landscape plan with index of species of plants to be planted to be provided.
4. Revised land use break up of mine lease area shall be submitted before initiating any activities
5. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided before initiating any activity.
6. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.10 **Application for environmental clearance for the proposed quarry project in Survey No. 270, Block 58 at Kattappana Village, Kattappana Panchayath, Udumbanchola Taluk, Idukki District, Kerala by M/s Alphonsa Granites (File No. 46/SEIAA/KL/7171/2012)**

The proponent made a brief presentation of their proposed mining project. The proposed project site falls within 09°43'N and 77°07'E. **SEAC found that the proposed mine area is having cardamom reserve forest as the boundary which is evident from the toposheet and the survey map provided. The proposed rock for quarrying falls in this cardamom hill reserve forest area where forest trees are also present. So the Committee raised concern on the present project proposal seeking permission for quarrying activities in a land adjacent to forest area.** The proponent stated that 42 acres of proposed land is rocky and that the area is not bordered by cardamom forest but by rubber plantations. But the Committee was not convinced of this and hence **the proponent was directed to provide a certificate from the Forests and Wildlife Department regarding the distance of the Reserve Forest from the project site and that the proposed land does not come within the cardamom hill reserve area.** Even after the clarification from the proponent regarding the queries raised by SEAC, the Committee was concerned about **the site coming under the ESZ-1 of WGEEP report. Hence the Committee DEFERRED the project proposal for the time being. It was further decided to inform the proponent to approach SEAC for environmental clearance at a later stage furnishing the following details, after the finalization of the WGEEP report specifically demarcating various ESZs, if required, in the light of the National Green Tribunal orders.** In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions:

1. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided to SEAC before initiating any activity.
2. Landscape plan with index of species of plants to be planted to be provided.

3. A certificate from the Forests and Wildlife Department regarding the applicability of cardamom hill reserve area regulations for the site.
4. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.11 Application for environmental clearance for the proposed quarry project in Survey No. 288/1, Block 32 at Koodal Village, Kalanjoor Panchayath, Adoor Taluk, Pathanamthitta District, Kerala by M/s Mavalan Granites Private Limited (File No. 51/SEIAA/KL/7509/2012)

After the brief presentation of the proposed project by the proponent **the primary concern raised by the members regarding the project was the proximity of proposed project site to the forest area at a distance of 150 m from the boundary of the project site.** The proposed project site falls within 9°08'N and 76°53'E. The proponent stated that they already have permission for quarrying lease valid up to 30th December 2012 as the mining operation had been going on for the past 10 years and has given application for seeking extension. **The proposed project site is a total government land and at this juncture the Committee raised concern on the lapse from the part of the Government in leasing out the land under its possession for quarrying activities.** The proponent was asked regarding the estimation of the total cost of the project. The proponent stated that the total cost of the project is the cost incurred towards possessing the land if it is a government land by way of royalty and the capital investment for buying the machinery to be exclusively used for the quarry related activities and other costs like wages for the employees, among others. The Committee found that the mining plan and the contour plan submitted by the proponent was not matching as the details provided in both were different and hence was difficult to evaluate. To this end the proponent stated that the confusion arised as they have included the entire land possessed by them in the mine plan without exclusively mentioning the proposed project site only. The proponent also stated that rubber plantation is seen all around the project site and the crusher is located at a distance of 150 m from the mine area. Regarding the employees engaged in mining activities the proponent informed that certified personnel approved by DGMS is working in the quarry and nearly 12 persons are working in the crusher unit itself.

The Committee pointed out that the pond that is being retained in the existing mine shall be reclaimed as it may be left unattended and abandoned in future as it is a government land. The Committee also suggested planting the flora suitable to the locality as part of eco-restoration since the project site has chances of finding endemic species. Hence the proponent was suggested to go for an ecosystem specific eco-restoration and to maintain safe buffer distances in the area. The Committee also pointed out that as per the land reclamation plan submitted by the project proponent major portion of the land is left as water body which is not advisable as the entire mine area shall be left as pits once the entire mining is over. Hence the proponent was directed not to leave more than 10 percent of the total mined area to be left as water body. The proponent was also directed to limit the mining depth up to 5 m.

Considering the above, the proposal is RECOMMENDED for environmental clearance. In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions:

1. Revised mining plan specific to the current project site.

2. Proper storm water management plans to be submitted.
3. Landscape plan with index of species of plants to be planted to be provided.
4. Assurance that the pond that is being retained in the existing mine shall be reclaimed.
5. Assurance that eco-restoration shall be done with plant species suitable to the locality.
6. Assurance in the form of affidavit that the mining bench shall be limited to 5 m.
7. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided before initiating any activity.
8. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.12 **Application for environmental clearance for the proposed additional facilities within the campus of St. Joseph’s College of Engineering & Technology, Palai, at Block No. 36 in Re-survey Nos. 78/6-1, 78/4, 80/3, 80/4, 85/2, 85/3, 85/3-2, 85/3-1, 113/5, 111/2-1, 111/2-2, 114/4-2, 114/5-1, 113/3-1, 116/10, 116/3, 116/3-1, 115/1-1, 104/1, 105/1, 105/2, 106/1, 111/1, 111/3, 112/2-2, 112/2-3, 113/1-1, 78/5, 78/2-1, 80/2, 80/1, 81/1, 81/2, 81/4, 81/5, 82/2, 83/2, 86/2, 111/4, 111/5, 80/2-1, 81/3 and Block No. 35, Re-survey No. 352/3-1 & 383/2-11 at Bharananganam Village and Panchayath, Meenanchil Taluk, Kottayam District, Kerala by M/s Diocesan Technical Education Trust, Palai (File No. 53/SEIAA/KL/7581/2012)**

A brief description of the project was made by the project proponent. The Committee stated that the proponent has to provide details regarding the proposed blocks with the total number of floors for each block. **SEAC emphasized that no construction shall be done in those 15 survey numbers mentioned in the NOC for construction of building issued by Bharananganam Grama Panchayat as the land belonging to those survey numbers being a nilam in land documents, and urged the proponent not to reclaim the nilam.** The proponent has also not provided the copy of sale of some survey numbers. **The proponent was also directed to submit the proposal omitting those survey numbers which is recorded as nilam in land documents.** The proponent stated that the said land had only coconut trees but still assured that they will not do any construction in the land coming under those survey numbers. The proponent has provided the cadastral map of Block No. 36 having all survey numbers except 81/3 but has not provided the cadastral map of Block No. 35. **The Committee pointed out that sufficient rainwater can be harvested from the proposed site to cater the water requirements of the proposed project. Four ponds are proposed in the project site and the Committee suggested finding suitable plans to direct storm water to be collected in these ponds. It was also suggested to conduct yield test of the existing wells during post monsoon season as water scarcity is anticipated in the region in future.** The proponent stated that in order to address the water scarcity problems and to conserve the available water they have made provisions for dual plumbing system and recycling treated sewage. The proponent has provided the landscape plan for the proposed project but the index of tree species to be planted is not given in that. Enough parking has been provided in the proposed plan.

Considering the above, the proposal was RECOMMENDED for environmental clearance stipulating the following specific conditions:

1. Copy of sale deed of survey numbers mentioned in the proposal which has not so far been provided to SEAC to be submitted.
2. Cadastral map of Block No. 35 to be provided.
3. Landscape plan with index of tree species to be planted to be provided.
4. Details regarding the proposed blocks with the total number of floors for each block shall be provided before initiating any activities.
5. Submit the proposal omitting those survey numbers which is recorded as nilam in land documents.
6. Assurance in the form of affidavit that no construction shall be done in those survey numbers recorded as nilam in land documents and that the land coming under those survey numbers shall not be reclaimed..
7. Maximize rain water harvesting and ground water recharge to sustain the yield of wells

Item No. 10.13 **Application for environmental clearance for the proposed quarry project in Survey Nos. 200/1, 202/2, Block 27 at Oorgattiri Village, Oorgattiri Panchayath, Eranadu Taluk, Malappuram District, Kerala by M/s PMR Granites India Private Limited (File No. 55/SEIAA/KL/7583/2012)**

After the brief description of the project by the proponent **the Committee sought clarification on the nature of the proposed project site marked in the google image and in the photographs provided, as the former showed thick vegetation whereas the latter showed the proposed project site as rocky areas. The Committee pointed out that permission cannot be given to conduct quarrying operations in an area having thick vegetation as seen from the google image.** To this end the proponent admitted the lapse on their part causing the locational error of the project site in the google image provided and stated that the entire boundary of lease area is rubber plantations. The proposed project site falls within 11°14' N and 76°06' E. The Committee was not satisfied with the photographs of the project site provided as the contour plan showed very steep sloping areas whereas the photographs did not show the same. The proponent answered that the proposed mining is done on top of a steeply sloping hill and the photographs are the top view of the proposed project site. **The Committee insisted to recommend for Environmental Clearance only after submission of the correct location in Google image marking the exact location of the project site and its assessment. The Committee was of opinion that the site is a highly fertile land with so much of overburden and hence the proponent was also asked to estimate the overburden and to use it for reclamation and refilling.**

When asked about the access road to the quarry, the proponent stated that for transportation of materials there exists a tarred road of 1.5 km distance made by them with the assistance of NABARD. They had also made provisions to contain dust during crushing operations by providing completely covered dust sucking machinery that works well at the source of dust generation itself and water sprinklers are also being used. **The proponent was directed for a restricted mining by retaining the present greenery to the maximum. The**

Committee was also of the opinion that the proposal of developing 1 hectare of land in the proposed mining area as water body was unscientific and urged for a more scientific approach for eco-restoration and reclamation. At this juncture, the Committee decided to direct all the proponents of the quarry to retain only a maximum of the 10 percent of the total mine area as water body instead of providing 50 percent as is done now and that the retained water body shall be maintained well with proper fencing and green area around it beautified appropriately.

Considering the above, the proposal was DEFERRED. In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions for further processing:

1. Quantity of overburden and their usage shall be provided before initiating activities.
2. Landscape plan with index of species of plants to be planted to be provided.
3. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided before initiating any activity.
4. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.14 **Application for environmental clearance for the proposed quarry project in Survey Nos. 284/10, 299/5, 17, 15, 14, 8, 10, Block No. 23 at Muthalamada - 1 Village, Chittur Taluk, Palakkad District, Kerala by M/s Five Star Metals (P) Ltd. (File No. 56/SEIAA/KL/7584/2012)**

The project proponent made a brief description of the proposed project. The proposed project site falls within 10°34'N and 76°48'E. The proponent was asked whether any crusher unit is associated within their quarry as it was not clear regarding the same since the proponent has not provided the vicinity map of the site and surroundings of the project site. The proponent stated that they have a crusher located within the project site which is an integral part of the quarry. Then the Committee suggested that in all such cases where crusher is an integral part of the quarry located within the project site it shall be specified as an interlinked project in Form 1. The Committee pointed out that the location marked as project site in the google map is an already mined area and sought clarification and requisite documents from the proponent regarding the permission obtained for mining lease for conducting quarrying activities in the area since the Committee was doubtful as to whether the proponent is seeking environmental clearance for an already mined area and where mining is going on at present. The Committee observed that a component of ore bed is present in the top soil and hence directed the proponent to make a rough estimate of its quantity and provide the same. The proponent was also reminded that the depth of mining should not go beyond the nearest stream level. The Committee after going through the proposal for reclamation submitted by the proponent suggested for a more extensive and practical plan for the same.

Over and above all, the Committee was concerned about the site, Chittur taluk, coming under the ESZ-1 of WGEEP report. With this in view the Committee decided to

DEFER the project proposal for the time being. It was further decided to inform the proponent to approach SEAC for environmental clearance at a later stage furnishing the following details, after the finalization of the WGEEP report specifically demarcating various ESZs, if required, in the light of the National Green Tribunal orders. This site entirely falls in Palghat gap region with minimal impact on surrounding. However the grid falls in ESZ-1 compelling the Committee to defer the case. In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions:

1. Copy of mining lease issued by Department of Mining and Geology to be provided.
2. Landscape plan with index of species of plants to be planted to be provided.
3. Assurance that the depth of mining shall not go beyond the nearest stream level.
4. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided before initiating any activity.
5. A perspective view and plans of reclamation activities to be provided before initiating any activity.
6. A rough estimate of the quantity of component of ore bed present in the top soil to be provided.

Item No. 10.15 **Application for environmental clearance for the proposed quarry project in Survey Nos. 1094/1-A, 1094/1-A1, 1094/1-A6, 1097/7-A, 1097/6-B2, 1101/3, 1097/7-B, 1097/6-A2, 1094/1-A27, 1097/6-B3, 1097/7-C2 at Marady Village, Marady Panchayath, Muvattupuzha Taluk, Ernakulam District, Kerala by M/s St. George Granites (File No. 57/SEIAA/KL/7585/2012)**

The project proponent made a brief description of the project. The proponent has not provided a valid proof of authorized signatory and the Committee insisted to submit the same. The proposed project site falls within 9°57' N and 76°32'E. They stated that out of the 12 hectare land, at present clearance is sought for 3.81 hectare of land and the boundary of the quarry area is already excavated. Thick vegetation is seen on the west side of the plot. **Since the location of the project site was not clear as it was wrongly marked in the google image provided, the proponent was directed to provide a google image clearly marking the project site and to provide the vicinity map of the site and surroundings of the project site. The proponent was also directed to make provision to channelize the storm water to a pit that has to be retained in the central area of the proposed mine. The Committee also found that the quantity of geological reserve given by the proponent was incorrect and hence suggested to recalculate and resubmit the value as it is a significant factor as far as the entrepreneur is concerned.** When asked about the internal road within the project site cutting it into two portions the proponent stated that the road is under their possession. **SEAC found that details of adjoining areas could not be clearly traced out from the surface layout plan provided by the proponent and asked the proponent to provide details regarding the same.** The proponent stated that the adjoining areas are surrounded by rubber plantations and they are also planning to have rubber plantations as part of eco-restoration in future. At this juncture **the Committee suggested to go in for cultivation of food crops as part of eco-restoration instead of going for cash crops like rubber foreseeing the food scarcity problems our state is going to face in near future.**

Considering the above, the proposal was RECOMMENDED for environmental clearance. In addition to scrupulously following the general conditions suggested for all

mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions:

1. Valid proof of Authorized Signatory to be provided.
2. Vicinity map (500 m radius) of the site and surroundings marking the exact location of the project site.
3. A declaration to the effect that the road within the plot is owned by the project proponent and that it is used exclusively by them.
4. Landscape plan with index of species of plants to be planted to be provided.
5. Assurance that the central area of mining shall be left as pit to collect water.
6. Quantity of geological reserve has to be recalculated and submitted.
7. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided before initiating any activity.
8. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.16 Application for environmental clearance for the proposed quarry project in Survey No. 168 at Karukutty Village, Karukutty Panchayath, Alwaye Taluk, Ernakulam District, Kerala by M/s Planters Aggregates (File No. 58/SEIAA/KL/7586/2012)

A brief description of the project was made by the proponent. The proposed project site falls within 10°16'N and 76°25' E. The Committee was not satisfied with the photographs of the project site provided by the proponent as they cannot make out the original quarry land under consideration of clearance from it as all the photographs showed the table top of the hill following the vertical phase. The Committee was also confused on the google image produced by the proponent as the site was wrongly marked in it. Regarding the depth of the overburden, the proponent stated that 1m top soil has to be removed to see the underlying rock. **The Committee pointed out that the mentioning of the proposed project site coming under Chimmini reserve forest is wrong and suggested the proponent to provide either the range or forest division of the proposed project site in future. When asked regarding the proof of authorized signatory, the proponent stated that he owns the property and is the sole proprietor of the firm. But since the ownership of the property is shared by Smt. Chithra Ramesh, the Committee asked the proponent to provide her consent for conducting mining operations in the proposed site.** When asked about the commitment of the proponent towards CSR it was stated by the proponent that they are providing scholarships to children in local schools and are providing aid to the local health centre.

Considering the above, the proposal was RECOMMENDED for environmental clearance. In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions:

1. Photographs from all the sides of the project site to be submitted.
2. Consent from Smt. Chithra Ramesh for conducting mining operations in the proposed project site to be submitted.
3. Landscape plan with index of species of plants to be planted to be provided.
4. Quantity of geological reserve has to be recalculated and submitted.

5. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided before initiating any activity.
6. A perspective view and plans of reclamation activities to be provided before initiating any activity.

Item No. 10.17 **Application for environmental clearance for the proposed Phase 1 development of Smart City (Kochi) in Survey Nos. 642, 643, 655 at Kakkanad Village, Kanayannur Taluk, Ernakulam District, Kerala by Smart City (Kochi) Infrastructure Pvt. Ltd.**
(File No. 52/SEIAA/KL/7560/2012)

Soon after the presentation of the project by the proponent **the Committee expressed their displeasure in drafting the ambitious project of the State Government in such a very casual manner. The Committee was of the opinion that the proponent has not taken into consideration seriously many of the environmental factors while drafting the proposal. The primary factor of concern regarding the project was the proof of authorized signatory submitted by the proponent. The Committee stated that since the project proponent is not an Indian and that he himself is not present for the meeting, he should authorize a person through the Indian consulate as his authorized signatory for the project which only then becomes the valid proof of authorized signatory. Another matter of concern for the Committee was the Conceptual Plan submitted by the proponent, which forms an integral part of the documents to be submitted for the appraisal process. The Conceptual Plan submitted by the proponent did not show most of the amenities proposed for the project, among other things, like proposed building with total number of floors, location of STP, solid waste storage area, green belt, RWH and water recharge pits and location of tube wells. The plan also did not show the internal traffic circulation of the project and hence was inadequate for an evaluation. So the proponent was directed to submit a revised Conceptual Plan incorporating all the requisite details.**

The proponent stated that out of the total 246.01 acres of land for the total project, now they have submitted proposal for an area of only 4 acres as the 1st phase of the project. The Committee suggested submitting the master plan of the whole project so as to get a clear picture regarding the same. To this end the proponent stated that the master plan is ready by now but has not become a public document. **The proponent has not clearly stated the facilities proposed for the project and the Committee suggested providing details regarding the same while resubmitting the proposal.** The proponent stated that they have provided adequate parking facilities which is exceeding above the prescribed minimum standards. The Committee asked whether KINFRA has made any commitment towards them regarding the water supply to the project. To this end the proponent stated that as per the frame work agreement KINFRA had already committed 1 MLD of water and 10 MW of power for the project and that they are ready to cater the entire water requirements of the proposed project. **But the Committee was of the opinion not to depend on a single source of water and suggested to find some other alternate source.**

As per the proposal submitted, it is suggested to dispose the solid waste in Brahmapuram plant. But the Committee suggested the proponent to develop an efficient solid waste management system of their own as this being a mega dream project of Kerala. The proponent has not mentioned anything about the Corporate Social Responsibility and hence SEAC suggested to provide concrete and specific plans regarding the same as it should benefit the society at large. **Moreover it was suggested for a planned green area development in consultation with a landscape expert as the proponent has suggested developing green area only in 10 percent of the total land area. The Committee suggested**

that for such a mega project about 40 percent of the total land area shall be set aside as green belt. The proponent has also not submitted the landscape plan, affidavits in stamp paper as stated in the check list and has not provided the details regarding the distance of the project site from nearest fire station and quantification of energy saved. Hence the proponent was directed to submit a revised conceptual plan. Since the proposal submitted by the proponent had many factual errors and lacked a specific plan of environmental management, the proponent was directed to redraft and resubmit the proposal. The project proponent accepted the fact that they have paid attention only to the building and construction aspects while drafting the proposal and has not taken into consideration the environmental aspects and agreed to resubmit the redrafted proposal.

The proposal was DEFERRED and the project proponent was directed to furnish the following before SEAC for reconsideration of the proposal.

1. Redraft and resubmit the proposal avoiding factual errors.
2. Notary attested affidavits in stamp paper as to the conditions mentioned in checklist
3. Distance of the project site from nearest fire station and quantification of energy saved to be provided.
4. Valid proof in support of authorized signatory through proper channel to be provided.
5. Assurance for the entire water requirement of the project.
6. Detailed plans for effective solid waste management by the proponent itself.
7. Details of Corporate Social Responsibility to be provided.
8. Proposal for green area development and a landscape plan with index of tree species to be planted.
9. Revised conceptual plan showing all details of the proposed project like location of STP, solid waste storage area, green belt, RWH and water recharge pits, location of tube wells, etc.

Item No. 10.18 **Application for obtaining environmental clearance for the proposed building stone quarry project in Survey Nos. 446/1 (P) & 446/2 (P) at Kottangal Village, Mallapally Taluk, Pathanamthitta District, Kerala by M/s Amity Rock Products Pvt. Ltd. (File No. 59/SEIAA/KL/7644/2012)**

A brief description of the project was made by the proponent. The proposed project site falls within 9°26'N and 76°45'E. The proponent stated that the total plot area is 90 acres and the quarry is operating for the past 4 years. Green belt with rubber plantations is provided outside the lease area and a private road having a length of 700 m is the access road to the project site. Human inhabitation is found at a distance of 350 m and so far no complaints have been raised by the inhabitants settled in the area. The Manager of the company is a retired hand who is a veteran in the field and is working for the firm for the past 3 years. He stated that the water from the RWH cum silt arresting pond will be utilized for dust suppression and series of water collection ponds are suggested for M-sand washings. **The most interesting aspect regarding the proposal was the latest Nonel Technology adopted for blasting of rocks. According to the proponent, fly rock dispersion will be comparatively less while using this technology as only shattering of rocks is done and hence the blasting vibrations are less. The Committee was very much impressed with the technology and proposed to have a FIELD VISIT TO STUDY and understand the same.** The proponent stated that they have set aside Rs. 10 lakhs towards Corporate Social Responsibility and they have already undertaken community development activities like construction of bus shelters, educational sponsorship, among others. The Committee suggested that the proponent should set aside a fixed sum in the budget allocation of the company towards periodical monitoring of the environmental quality. **The Committee also pointed out that the benches having a height of 10 m and width 5 m as stated in the proposal was not permissible as it may cause**

stability problems with such a large cutting which may induce landslides in future. The Committee suggested for a bench height and width of 5 m. But the proponent stated that DGMS has given sanction for a bench height and width of 10 m. The Committee directed the proponent to produce the copy of the same and suggested that if DGMS has given such permission it shall be brought to the notice of the DGMS regarding the adverse effects of the same.

The project proponent has not mentioned anything about the quantity of the top soil to be removed from the project site for which the proponent stated that the site is devoid of top soil. The Committee was not satisfied with the answer. In addition to these, a lot of factual errors were spotted in the proposal submitted by the proponent and the proponent has not answered clearly and specifically many queries raised in the questionnaire and Form 1 like the number of trips required to transport the mineral on daily basis, the total water requirement of the project, nearest human inhabitation, religious places, proposed production capacity, land use pattern of the project site, mine closure plan, noise management plan, environmental monitoring, estimated cost of the project, mined area management and amount set aside towards Corporate Social Responsibility. Moreover the proponent has stated the source of water as storm and ground water (open well) as given in the questionnaire but in Form 1 the expected source of water was given as nil. Considering all these the proponent was directed to redraft the proposal avoiding factual errors and resubmit it answering specifically the queries to all points as given in questionnaire and Form 1.

Considering all the above, the proposal was DEFERRED. In addition to scrupulously following the general conditions suggested for all mining projects, the Committee resolved to insist the proponent for compliance of the following specific conditions for reconsideration of the proposal:

1. Redraft and resubmit the proposal avoiding factual errors.
2. Affidavits in stamp paper regarding the conditions mentioned in checklist.
3. Assurance that periodical monitoring of environmental quality shall be done.
4. Copy of the permission from DGMS specifying the bench height and width as 10 m.
5. Landscape plan with index of species of plants to be planted to be provided.
6. Specific methodology adopted for drilling and blasting including the technical details regarding the geometry of drill holes to be provided before initiating any activity.
7. A perspective view and plans of reclamation activities to be provided before initiating any activity.

The meeting concluded at 4.30 pm on 27.11.2012 with a vote of thanks by the Chairman. The members unanimously responded with thanks to the Chair.