

**Minutes of the 124<sup>th</sup> Goa State Expert Appraisal Committee (Goa-SEAC) meeting held on 26<sup>th</sup> June 2020 at 4.30 pm in the Conference Room of the 3<sup>rd</sup> floor, GTDC, Patto-Panaji, Goa.**

The hundred and twenty fourth meeting of the Goa-SEAC was held on 26<sup>th</sup> June 2020 in the Conference room of the GTDC, Paryatan Bhavan, Panaji at 4.30 pm under the Chairmanship of Prof. Suhas Godse. The list of members who attended the meeting is at Annexure – I.

At the beginning Chairman welcomed the members and requested Secretary, SEAC to proceed as per the Agenda items (refer Annexure – 2).

**1. Prescon Homes Pvt Ltd** for proposed building and construction of senior citizen Housing, Azzosim, Tiswadi, Goa. The committee conducted site inspection on 11<sup>th</sup> January 2020. All issues related to environment including air, land, soil, ecology and biodiversity and social aspects were discussed. Consolidated statements, Form I and IA project specific presentation and plans submitted are taken on the record. Brief project details submitted by the project proponent is as follows:

<b>Sr.No.</b>	<b>Description</b>	<b>Details</b>
1.	Name & Location of the project	Proposed building construction of Senior Citizen Housing Project  Located at Sy.no.8-1/D of Azzosim Village, Tiswadi Taluka, Goa
2.	Plot area	30,570 m <sup>2</sup>
3.	Net plot area	25,743 m <sup>2</sup>
4.	FSI area Non FSI area Total construction area Building configuration & Height of the building	FAR: 59.99% Total built up area: 26,765.50 m <sup>2</sup> Building configuration: Stilt + 4 floors & Ground + 4 floors Height of building: Stilt + 11.5 mtr
5.	No. of shops/flats	1 BHK ó 112 2 BHK ó 128 Club house ó 1 Staff rooms ó 24 beds
6.	Total water requirement Construction/Operation phase	Construction phase: 36.5 KLD Operation phase: 222.42 KLD
7.	Sewage generation	Construction phase: 5.5 KLD Operation phase: 169.06

		KLD
8.	STP capacity/ Grey water treatment plant capacity	STP: 170 KLD
9.	Total solid waste quantities	654 Kg/day
10.	RG area	Green Belt area: 5475.25 m <sup>2</sup>
11.	No. of trees	169
12.	Energy efficiency	Solar water heaters, LED Lights, Solar lights
13.	Parking 4W and 2W	315 Cars
14.	Power requirement	1519.4 KW
15.	D.G set capacity	62.5 KVA X 1 no. 250 KVA X 1 no.
16.	RWH tank capacity	--
17.	EMP cost (including DMP cost)	Capacity cost: 300 lakhs
18.	No. of trees to be cut	52
19.	No. of trees to be planted on site	150
20.	CRZ status	Not applicable

The committee during 115<sup>th</sup> meeting held on 2<sup>nd</sup> March 2020 after hearing the detailed presentation by Project Proponent decided conduct re inspection of the proposed site. Accordingly the site inspection was done on 2<sup>nd</sup> May 2020. The committee noted that permission for tree cutting are obtained in advance and when the members visit the site, the existing flora and fauna cannot be assessed. The committee recommended that the Authority should write to the Forest Department and Town and Country Planning Department/ Planning and Development Authority that wherever a project requires environmental clearance no tree cutting permission be granted until inspection of the Goa-SEAC/ SEIAA.

1. Further, the committee decided to recommend the project for environmental clearance under the provision of EIA Notification 2006 (as amended) with the following conditions.

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- i. The PP should develop and Urban Forest with local species in and around area of 200 to 500 sq mts.
- ii. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- iii. Sewage Treatment Plant (STP) contract should be for minimum period of 5 years with operation and maintenance contract after commissioning /completion of project.
- iv. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body.
- v. E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
- vi. Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels towards south facing walls as and when made applicable in future.
- vii. The Project Proponent shall utilise fly ash bricks in masonry works.

- viii. The PP shall use construction debris for land filling wherever applicable.
- ix. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- x. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimizes energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- xi. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- xii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning, etc. shall be done.
- xiii. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xiv. Solar based electric power shall be provided to each unit for at least two bulbs/light and one fan. As proposed, central lighting and street lighting shall also be based on solar power.
- xv. The project proponent will provide landscape bed of 600mm wide X 600mm deep along the periphery of the plot to carry out plantation of trees. The treated water from the sewage treatment plant will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- xvi. PP shall make provision for charging points for electronic vehicles in the parking area.

**2. Project Proponent should implement Dust mitigation measures for construction activities such as:**

- a. Roads leading to or at construction sites must be paved and blacktopped (i.e. metallic roads).
- b. No excavation of soil shall be carried out without adequate dust mitigation measures in place.
- c. No loose soil or sand or Construction & Demolition Waste or any other construction material that causes dust shall be left uncovered.
- d. Wind-breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided.
- e. Water sprinkling system shall be put in place.
- f. Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.

- g. New serial number 107ø has been inserted which relates to Mandatory Implementation of Dust Mitigation Measures for all Construction and Demolition Activities:
- h. Grinding and cutting of building materials in open area shall be prohibited.
- i. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
- j. No uncovered vehicles carrying construction material and waste shall be permitted.
- k. Construction and Demolition Waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site.
- l. Further, progress will be reviewed after six months (*minimum 3 times in a year*) depending upon progress of the work. Further, the compliance to these conditions as and when submitted by PP will be verified /ascertained by the authority to propose additional conditions if any.

3. Further, the Authority has decided that PP needs to comply to the following “**General Conditions**”:-

- a. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- b. **Solar power generation** - Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from non-conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels as and when made applicable in future. In addition, south-facing walls to be utilized to install solar panels to harness optimum solar energy. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar-plus-hybrid non-conventional source as source of energy.
- c. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
- d. PP should not disturb the natural drainage and as far as possible, maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.
- e. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its land use categorization / zoning.
- f. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- g. This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations,

Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgements / Orders issued by Honøble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified by the competent authorities.

- h. PP should ensure and ascertain that ~~civil plans~~ which were submitted to the Committee/ Authority during the process of project appraisal be submitted to other line Departments / agencies concerned while seeking NOC / Consents/ Permissions, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.
  - i. E-waste if any shall be disposed through Authorised vendor as per E-waste (*Management & Transboundary Movement*) Rules, 2016.
  - j. This environmental clearance is issued subject to obtaining NOC from the Forestry & Wildlife angle including clearance from the Standing Committee of the National Board for wildlife, if applicable. The grant of environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project, which has to be dealt separately by the competent authorities in accordance with law.
  - k. The height, construction gross built up area of proposed construction is **26,765.50 Sq.mts** shall be in accordance with the existing FSI/ FAR norms of the local body and planning authorities and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
  - l. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
4. Further, the PP is required to comply with the following **“General Conditions” during construction phase:-**
- a. ~~Consent to Establish~~ shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
  - b. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) Government of Goa.
  - c. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. **In case of any change(s) in the scope of the project and/or otherwise, the project proponent needs to inform this Authority.**
  - d. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.

- e. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the Goa State Pollution Control Board (GSPCB).
- f. The installation of the Sewage Treatment Plant (STP) if any should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.
- g. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.
- h. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- i. The solid waste generated should be properly segregated. Dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- j. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- k. Arrangements shall be made that waste water and storm water do not get mixed.
- l. All the top soil excavated during construction activities should be stored if or used in horticulture/landscape development within the project site.
- m. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- n. Green-belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest / Agriculture Department.
- o. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- p. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.
- q. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary authorisation of the GSPCB.
- r. The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concerned authority shall be taken.

- s. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.
- t. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- u. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc. as per National Building Code (NBC) including measures from lighting.
- v. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- w. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- x. The groundwater level and its quality should be monitored regularly in consultation with ground water authority of the Water Resources Department (WRD), Government of Goa.
- y. The installation of the sewage treatment plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the GSPCB before the project is commissioned for operation. Treated effluent released from STP shall be recycled / reused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the sewer line. Treatment of 100% grey water through centralised treatment should be done. Necessary measures should be adopted to mitigate the odour problem from STP.
- z. Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- aa. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- bb. Energy conservation measures like installation of LEDs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use of CFLs / TFLs, if any, should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.
- cc. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment Protection Act 1986. The height of stack of DG sets should be equal to the height needed for the combine capacity of all proposed DG sets.

- dd. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- ee. Traffic congestions near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.
- ff. Opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatorily for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- gg. The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- hh. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
- ii. Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.
- jj. Six monthly compliance reports should be submitted to the MOEF with copy to the Goa-SEIAA and GSPCB.

5. Further, the Authority decided to direct the PP to comply with the following **“General Conditions” during post-construction phase:-**

- a. PP shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.
- b. Wet garbage should be treated by organic waste convertor and treated waste (manure) should be utilised in the existing premises for gardening. No wet garbage will be disposed outside the premises. Local authority should ensure compliance to this.
- c. A complete set of all the documents submitted to Goa-SEIAA should be forwarded to local authority, GSPCB and Planning authority.
- d. In case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
- e. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise break-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.



- f. A copy of the environmental clearance letter shall be sent by PP to the concerned Village Panchayat and planning authority as applicable, from which suggestions / representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP within one week time period from the date of issue of environmental clearance.
- g. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF & CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO<sub>2</sub> and NO<sub>x</sub> (*ambient levels as well as D.G. stack emissions*) shall be monitored.
- h. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is to be submitted to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended) and subsequently shall also be put on the company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective Regional Office of the MoEF & CC.
- i. Consent to Operate shall be obtained from GSPCB before operation, failing which the Environmental Clearance herein shall be deemed to be withdrawn.
- j. Sewage Treatment Plant (STP) shall be installed at site. The STP should be certified by an independent expert and adequacy report in this regard should be submitted to GSPCB before the project is commissioned for operation. Necessary measures should be made to mitigate the odour problem from STP. There shall also be a comprehensive AMC of 5 years from the commissioning of the STP by the agency installing the STP.
- k. The solid waste (dry as well as wet garbage) generated should be properly collected and segregated. Organic Waste Converter shall be installed by RWA for the treatment of biodegradable (wet) garbage generated within the complex. Non-Biodegradable waste should be outsourced properly after recovery of recyclable material. Adequate measures should be taken to prevent odour problem.
- l. Utilization of Diesel power generating sets is subject to power failure condition only. The DG sets proposed as a source of power back up during operation phase should be of enclosed type, low sulphur diesel run and conform to rules made under the Environment (Protection) Act, 1986. The DG sets should be subjected to periodic noise and stack monitoring in consultation with GSPCB. Waste/used diesel should be stored and managed as per the Hazardous and other Wastes (*Management & Transboundary Movement*) Rules, 2016 as amended.
- m. Noise should be controlled to ensure that it does not exceed the prescribed standards both during day & night time.
- n. The ground water drawal from existing/proposed bore wells if any should be done only with the prior permission of Ground Water Board. The ground water level and its quality should also be monitored regularly both during construction and operation phase in consultation with Ground Water Board.

- o. Traffic congestion near the entry and exit points from the roads adjoining the project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- p. Energy Conservation measures such as solar lighting for common area, solar water heating system, CFLs/TFLs for lighting of areas, LED lights for signage, solar inverters on the etc should be adopted.
- q. Used CFLs/TFLs should be properly collected and disposed off/ sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
- r. A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors etc and submit to the State Expert Appraisal Committee and a copy to GSPCB in three months time.

2. Compliances received from **Ivor Braganza** for proposed basalt quarry having lease area 1.8 ha. The proposed extraction capacity 15000 cum per annum. The committee conducted site inspection of the proposed site on 23<sup>rd</sup> May 2020. Details submitted by PP are as tabulated below:

<b>Serial Number</b>	<b>Item</b>	<b>Details</b>
1.	<b>Name of the Project/s</b>	<b>Basalt stone quarry</b>
2.	<b>Name of the applicant</b>	<b>Ivor Andrew Braganza</b>
3.	<b>Type of quarry</b>	<b>basalt- minor minerals</b>
4.	<b>New/Expansion/Modernization/renewal</b>	<b>new</b>
5.	<b>Existing Capacity/lease Area etc.</b>	<b>lease area 18000 sqm capacity 15000 cum/annum</b>
6.	<b>Category of Project i.e. 'A' or 'B'</b>	<b>b minor minerals b1 category</b>
7.	<b>Plot/Survey/Khasra No.</b>	<b>5/1</b>
8.	<b>Village</b>	<b>Moissal</b>
9.	<b>District</b>	<b>South Goa</b>
10.	<b>State</b>	<b>Goa</b>
11.	<b>Nearest railway station/airport , public facility from site (public dwelling, school, educational institution, hospital, Dam)</b>	<b>railway station Sanvordem-Curchorem 4 km</b>
12.	<b>Area excavated</b>	<b>na --new quarry</b>
13.	<b>Balance area available</b>	<b>na—new quarry</b>
14.	<b>Proposed expansion capacity</b>	<b>na— new quarry</b>

15.	Raw material overburden ratio	0.2 %
16.	Location of Stack overburden	na- quarry yet to be opened
17.	Existing flora and fauna at site with details of species and nos of trees	enclosed
18.	Proposed plantation plan	local species 100 nos on the stacked overburden
19.	Tree plantation proposed species and number	local species 100 nos on the stacked overburden
20.	Approached road	quarry internal road
21.	Proposed/Existing road Paved/unpaved with length of road	existing road from main road quarry is with paved hard rubbles.
22.	Distance from nearest Locality	4.0 km sanvordem
23.	Distance from nearest metallic road	500 m
24.	Distance from nearest water body	1.0 km – moissal dam
25.	Whether site has existing water body	no
26.	Distance from wild life sanctuary	7.0 km mahaveer wild life sanctuary
27.	Distance from Ecological Sensitive Area /zone boundary	6.0 km
28.	List of Endemic species & IUCN status	not available
29.	Details on IBA (Important bird area)	7.0 km mahaveer wild life sanctuary
30.	Proposed mitigation measures	<ol style="list-style-type: none"> <li>1. controlled blasting for noise</li> <li>2. water spraying for suppression of dust</li> <li>3. plantation of trees for dust &amp; sound pollution</li> </ol>
31.	Dust mitigation measures	water spraying
32.	Noise mitigation measures	drilling with spraying of water & controlled blasting. planting of trees for noise suppression.
33.	Number of trucks plying per day	6 nos

The committee noted this new quarry is proposed adjacent to existing quarry and the compliance submitted in respect of restoration of the quarry; adjacent to the proposed quarry and decided to recommend the same for environmental clearance with the following conditions:-

1. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. The lease boundary may be subsequently geo-referenced for precise positioning and

ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.

2. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place on route.
3. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt / laterite stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintaining hygiene surrounding the proposed lease boundary.
4. The lease holder shall undertake adequate safeguard measures during extraction of basalt stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Quarrying operations should be limited to **day-hours time** (06 a.m. to 06 p.m. only) with specified time reserved for blasting. Regular monitoring of groundwater levels and its physico-chemical quality parameters shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir / irrigational canal*) should be monitored for similar parameters on quarterly basis and/or seasonally (*i.e. pre-monsoon / monsoon and post-monsoon*).
5. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
6. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (*to be measures in January, April and November every-year*) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively.
7. Green belt development shall be carried out considering CPCB guidelines including selection of plant species in consultation with Forest Department / Zonal Agricultural Office, as applicable.
8. The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of surface / groundwater from within the lease area.
9. Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB.
10. Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
11. The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. specifying the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the Directorate of Mines and Geology (DMG), Goa, this Authority as well as Goa State Pollution Control Board (GSPCB).
12. Any change (*i.e. modification / expansion / alteration*) in lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority as per the provisions of the EIA Notification, 2006 (*as amended till date*).

13. All necessary statutory clearances from relevant Authorities concerned shall be obtained before start of quarrying operations.
14. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
15. Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).
16. Restoration of the existing quarry as submitted with the application.

3. Compliances received from **Mr. Prashant Kamat** minor mineral quarry (**new\_basalt stone quarry**) in survey no. 36/1 and 37/0 villages Allorna, Pernem, Goa. The consultant Mr. Nishant Kurade presented brief project report of the proposed basalt quarry having lease area 1.3982 ha. The proposed extraction capacity 4500 cum per annum. The committee conducted site inspection of the proposed site on 22<sup>nd</sup> May 2020. Details submitted by PP are as tabulated below:

Serial Number	Item	Details
1.	Name of the Project/s	Basalt stone quarry
2.	Name of the applicant	Prashant Kamat
3.	Name of quarry	Na
4.	Type of quarry	Basalt- minor minerals
5.	S. No. in the Schedule	
6.	New/Expansion/Modernization/renewal	New
7.	Existing Capacity/lease Area etc.	Lease area 13982 sqmsqm Capacity 4500 cum/annum
8.	Category of Project i.e. 'A' or 'B'	B minor minerals b1 category
9.	Plot/Survey/Khasra No.	36/1 & 37/0
10.	Village	Allorna
11.	District	North Goa
12.	State	Goa
13.	Nearest railway station/airport , public facility from site (public dwelling, school, educational institution, hospital, Dam)	Railway station Pernem 7 km
14.	Area excavated	Na --new quarry
15.	Balance area available	Na—new quarry

16.	Proposed expansion capacity	Na— new quarry
17.	Raw material overburden ratio	0.4 %
18.	Location of Stack overburden	Na- quarry yet to be opened
19.	Existing flora and fauna at site with details of species and nos of trees	Na
20.	Proposed plantation plan	Local species 100 nos on the stacked overburden
21.	Tree plantation proposed species and number	Local species 100 nos on the stacked overburden
22.	Approached road	Quarry internal road
23.	Proposed/Existing road Paved/unpaved with length of road	Existing road from main road quarry is with paved hard rubbles.
24.	Distance from nearest Locality	Ibrampur 2.0 km
25.	Distance from nearest metallic road	300 m
26.	Distance from nearest water body	3.0 km – chandel water supply
27.	Whether site has existing water body	No
28.	Distance from wild life sanctuary	12.0 km bondla wild life sanctuary
29.	Distance from Ecological Sensitive Area /zone boundary	11.0 km
30.	List of Endemic species & IUCN status	Not available
31.	Details on IBA (Important bird area)	12.0 km bondla wild life sanctuary
32.	Proposed mitigation measures	4. Controlled blasting for noise 5. Water spraying for supression of dust 6. Plantation of trees for dust & sound pollution
33.	Dust mitigation measures	Water spraying
34.	Number of trucks plying per day	4 nos

The committee noted that this new quarry is proposed adjacent to existing quarry and decided to recommend the same for environmental clearance with the following conditions:-

1. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. The lease boundary may be subsequently geo-referenced for precise positioning and ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.

2. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place on route.
3. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt / laterite stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintaining hygiene surrounding the proposed lease boundary.
4. The lease holder shall undertake adequate safeguard measures during extraction of basalt stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Quarrying operations should be limited to **day-hours time** (06 a.m. to 06 p.m. only) with specified time reserved for blasting. Regular monitoring of groundwater levels and its physico-chemical quality parameters shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir / irrigational canal*) should be monitored for similar parameters on quarterly basis and/or seasonally (*i.e. pre-monsoon / monsoon and post-monsoon*).
5. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
6. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (*to be measured in January, April and November every-year*) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively.
7. Green belt development shall be carried out considering CPCB guidelines including selection of plant species in consultation with Forest Department / Zonal Agricultural Office, as applicable.
8. The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of surface / groundwater from within the lease area.
9. Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB.
10. Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
11. The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. specifying the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the Directorate of Mines and Geology (DMG), Goa, this Authority as well as Goa State Pollution Control Board (GSPCB).
12. Any change (*i.e. modification / expansion / alteration*) in lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority as per the provisions of the EIA Notification, 2006 (*as amended till date*).
13. All necessary statutory clearances from relevant Authorities concerned shall be obtained before start of quarrying operations.

14. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
15. Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

4. Compliances received from **Smt. Meeravati Velip** minor mineral quarry (**new basalt stone quarry**) in survey no. 30/1 village Gokuldem, Quepem, Goa. The consultant M/s Joshi Associates presented brief project report of the proposed basalt quarry having lease area 1.0000 ha. The proposed extraction capacity 5000 cum per annum. The committee conducted site inspection of the proposed site on 23<sup>rd</sup> May 2020. Details submitted by PP are as tabulated below:

Serial Number	Item	Details
1.	Name of the Project/s	GOKULDEM BASALT QUARRY
2.	Name of the applicant	MRS. MEERAVATI MHALU VELIP
3.	Name of quarry	GOKULDEM BASALT QUARRY
4.	Type of quarry	BASALT
5.	S. No. in the Schedule	1(a)
6.	New/Expansion/Modernization/renewal	NEW
7.	Existing Capacity/lease Area etc.	5000m <sup>3</sup> /Year, 1.0000Ha Area
8.	Category of Project i.e. 'A' or 'B'	B2
9.	Plot/Survey/Khasra No.	30/1
10.	Village	GOKULDEM
11.	District	South Goa
12.	State	Goa
13.	Nearest railway station/airport , public facility from site (public dwelling, school, educational institution, hospital, Dam)	9.5Km Bali Railway Station 45Km Dabolim Air Port 1.00Km Public dwelling 0.60Km School 14.0Km Health centre at Bali 0.43Km weir on Karka rivulet
14.	Area excavated	NIL
15.	Balance area available	1.0000Ha
16.	Proposed expansion capacity	New proposal
17.	Raw material overburden ratio	1:0.3
18.	Location of Stack overburden	With in lease area
19.	Existing flora and fauna at site with details of species and nos of trees	Existing trees PLEASE REFER ANNEXURE-1
20.	Proposed plantation plan	Dump , unutilised portion of the lease and fringe area
21.	Tree plantation proposed species and number	40 trees of cashew 10 trees of Mango & Jackfruit 10 trees of kinnal 10 trees of Kumbyo
22.	Approached road	Not Existing to be laid
23.	Proposed/Existing road Paved/unpaved with length of road	Proposed unpaved of 320m
24.	Distance from nearest Locality	0.850Km
25.	Distance from nearest metallic road	320m
26.	Distance from nearest water body	340m Karka Rivulet
27.	Whether site has existing water body	No



28.	Distance from wild life sanctuary	8Km Netravati wild life sanctiary
29.	Distance from Ecological Sensitive Area /zone boundary	7Km ESZ of Netravati wild life sanctuary
30.	List of Endemic species & IUCN status	Unavailable
31.	Details on IBA (Important bird area)	Netravati wild life sanctuary
32.	Number of trucks plying per day	3 to 4 trips in a day
33.	Details on storage of explosives used for blasting	No storage of Explosive Blasting shall be carried out through contractor having valid mobile Magazine licence.

The committee noted that the proposal is to develop a virgin area of cashew orchard for development of basalt quarry accordingly , the Authority may take policy decision on such applications. .

5. Compliances received from **Mr. Kamlesh Mote** minor mineral quarry (**new laterite stone quarry**) in survey no. 125/0 village Torxem, Pernem, Goa. The consultant M/s Joshi Associates presented brief project report of the proposed basalt quarry having lease area 0.6000 ha. The proposed extraction capacity 5000 cum per annum. The committee conducted site inspection of the proposed site on 21<sup>st</sup> May 2020. Details submitted by PP are as tabulated below:

Serial Number	Item	Details
34.	Name of the Project/s	GOKULDEM BASALT QUARRY
35.	Name of the applicant	MRS. MEERAVATI MHALU VELIP
36.	Name of quarry	GOKULDEM BASALT QUARRY
37.	Type of quarry	BASALT
38.	S. No. in the Schedule	1(a)
39.	New/Expansion/Modernization/renewal	NEW
40.	Existing Capacity/lease Area etc.	5000m <sup>3</sup> /Year, 1.0000Ha Area
41.	Category of Project i.e. 'A' or 'B'	B2
42.	Plot/Survey/Khasra No.	30/1
43.	Village	GOKULDEM
44.	District	South Goa
45.	State	Goa
46.	Nearest railway station/airport , public facility from site (public dwelling, school, educational institution, hospital, Dam)	9.5Km Bali Railway Station 45Km Dabolim Air Port 1.00Km Public dwelling 0.60Km School 14.0Km Health centre at Bali 0.43Km weir on Karka rivulet
47.	Area excavated	NIL
48.	Balance area available	1.0000Ha
49.	Proposed expansion capacity	New proposal
50.	Raw material overburden ratio	1:0.3
51.	Location of Stack overburden	With in lease area
52.	Existing flora and fauna at site with details of species and nos of trees	Existing trees PLEASE REFER

		<b>ANNEXURE-1</b>
<b>53.</b>	<b>Proposed plantation plan</b>	<b>Dump , unutilised portion of the lease and fringe area</b>
<b>54.</b>	<b>Tree plantation proposed species and number</b>	<b>40 trees of cashew 10 trees of Mango &amp; Jackfruit 10 trees of kinnal 10 trees of Kumbyo</b>
<b>55.</b>	<b>Approached road</b>	<b>Not Existing to be laid</b>
<b>56.</b>	<b>Proposed/Existing road Paved/unpaved with length of road</b>	<b>Proposed unpaved of 320m</b>
<b>57.</b>	<b>Distance from nearest Locality</b>	<b>0.850Km</b>
<b>58.</b>	<b>Distance from nearest metallic road</b>	<b>320m</b>
<b>59.</b>	<b>Distance from nearest water body</b>	<b>340m Karka Rivulet</b>
<b>60.</b>	<b>Whether site has existing water body</b>	<b>No</b>
<b>61.</b>	<b>Distance from wild life sanctuary</b>	<b>8Km Netravati wild life sanctiary</b>
<b>62.</b>	<b>Distance from Ecological Sensitive Area /zone boundary</b>	<b>7Km ESZ of Netravati wild life sanctuary</b>
<b>63.</b>	<b>List of Endemic species &amp; IUCN status</b>	<b>Unavailable</b>
<b>64.</b>	<b>Details on IBA (Important bird area)</b>	<b>Netravati wild life sanctuary</b>
<b>65.</b>	<b>Number of trucks plying per day</b>	<b>3 to 4 trips in a day</b>
<b>66.</b>	<b>Details on storage of explosives used for blasting</b>	<b>No storage of Explosive Blasting shall be carried out through contractor having valid mobile Magazine licence.</b>

The committee decided to recommend the said for grant of environmental clearance with the following conditions;-

1. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. The lease boundary may be subsequently geo-referenced for precise positioning and ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.
2. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place on route.
3. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt / laterite stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintaining hygiene surrounding the proposed lease boundary.
4. The lease holder shall undertake adequate safeguard measures during extraction of basalt stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Quarrying operations should be limited to **day-hours time** (06 a.m. to 06 p.m.only) with specified time reserved for ~~blasting~~ Regular monitoring of groundwater levels and its physico-chemical quality parameters shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir / irrigational canal*) should be monitored for similar parameters on quarterly basis and/or seasonally (*i.e. pre-monsoon / monsoon and post-monsoon*).

5. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
6. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (*to be measures in January, April and November every-year*) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively.
7. Green belt development shall be carried out considering CPCB guidelines including selection of plant species in consultation with Forest Department / Zonal Agricultural Office, as applicable.
8. The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of surface / groundwater from within the lease area.
9. Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB.
10. Environmental clearance (EC) is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent Authority, if applicable.
11. The mining officer / in-charge of quarrying operations on-site shall submit six-monthly report in hard and soft copy formats w.r.t. specifying the status of compliance of the stipulated environmental clearance conditions (*i.e. Specific and General conditions*) to the Directorate of Mines and Geology (DMG), Goa, this Authority as well as Goa State Pollution Control Board (GSPCB).
12. Any change (*i.e. modification / expansion / alteration*) in lease area / quarrying operations / extraction capacity / modernization / scope of working / environment management plan (EMP) shall require re-appraisal by this Authority as per the provisions of the EIA Notification, 2006 (*as amended till date*).
13. All necessary statutory clearances from relevant Authorities concerned shall be obtained before start of quarrying operations.
14. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other administrative reasons.
15. Any appeal against this prior environmental clearance shall lie before the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

6. Compliances received from **Smt Anila Rege** minor mineral quarry (**new basalt stone quarry**) in survey no. 87 & 88 village Cotombi, Quepem, Goa. The consultant M/s Joshi Associates presented brief project report of the proposed basalt quarry having lease area 0.6000 ha. The proposed extraction capacity 5000 cum per annum. The committee conducted site inspection of the proposed site on 23<sup>rd</sup> May 2020. Details submitted by PP are as tabulated below:

Serial Number	Item	Details

67.	Name of the Project/s	Cotombi Basalt Quarry
68.	Name of the applicant	Smt. Anila Rege
69.	Name of quarry	Cotombi basalt quarry
70.	Type of quarry	Basalt stone
71.	S. No. in the Schedule	1(a)
72.	New/Expansion/Modernization/renewal	New
73.	Existing Capacity/lease Area etc.	Nil/ 1.4Ha
74.	Category of Project i.e. 'A' or 'B'	B2
75.	Plot/Survey/Khasra No.	S.No 87 & 88
76.	Village	Cotombi
77.	District	South Goa
78.	State	Goa
79.	Nearest railway station/airport , public facility from site (public dwelling, school, educational institution, hospital, Dam)	3.0Km Chandor Railway Station 32Km Dabolim Air Port 0.25Km Public dwelling 1.40Km School 2.9Km Health centre at Quepem 3.35Km Salauli Dam
80.	Area excavated	Nil
81.	Balance area available	1.4000Ha
82.	Proposed expansion capacity	3600m <sup>3</sup> /annum
83.	Raw material overburden ratio	1:0.55
84.	Location of Stack overburden	Southern side of the lease
85.	Existing flora and fauna at site with details of species and nos of trees	As per the annexure-1
86.	Proposed plantation plan	Along the lease boundary, Backfilled and unutilised area.
87.	Tree plantation proposed species and number	10 Trees each of Kinnal, Moi, Kumbyo and Khair 5 Trees each of Mango & Jackfruit
88.	Approached road	Existing
89.	Proposed/Existing road Paved/unpaved with length of road	Existing unpaved about 1Km
90.	Distance from nearest Locality	About 900m
91.	Distance from nearest metallic road	1Km
92.	Distance from nearest water body	1.25Km Kushavati River
93.	Whether site has existing water body	No
94.	Distance from wild life sanctuary	13Km Mahavir Wild Life Sanctuary
95.	Distance from Ecological Sensitive Area /zone boundary	12Km ESZ of Mahavir Sanctuary
96.	List of Endemic species & IUCN status	Unavailable
97.	Details on IBA (Important bird area)	Lake raital Curtorim about 7Km
98.	Number of trucks plying per day	2 to 3 trips in a day
99.	Details on storage of explosives used for blasting	Contractual blasting through an approved agency shall be carried out .

The committee noted that the proposal is to develop a virgin area for development of basalt quarry and the Authority may take policy decision on such applications.

7. To decide on a application from **Captain of Ports, Panaji** for Proposed re-development of nine Coastal Jetties at Goa. in respect of the public hearing the committee deliberated and decided to further inform Captain of Ports Department and Goa State Pollution Board that project proponent (i.e.) captain of [ports should compile the executive summary of EIA

reports of all proposed 9 jetties and make available this compilation with all EIA reports in order to make available with every local bodies concerned in north and South Goa for public consultation.

*The meeting ended with a vote of thanks to the chair.*

**Dr. Purushotam Pednekar** \_\_\_\_\_ *Sd/-* \_\_\_\_\_

**Dr. M.K. Janarthanam** \_\_\_\_\_ *Sd/-* \_\_\_\_\_

**Dr. Nitin Sawant** \_\_\_\_\_ *Sd/-* \_\_\_\_\_

**Dr. C.U. Rivonker** \_\_\_\_\_ *Sd/-* \_\_\_\_\_

**Shri. Dominic Fernandes** \_\_\_\_\_ *Sd/-* \_\_\_\_\_

*Sd/-*

**Shri. SanjeevJoglekar)**  
(Secretary Goa-SEAC)

*Sd/-*

**Shri. SuhasGodse**  
(Chairman Goa-SEAC)

Place: Patto, Panaji

Date: June 2020.

### **Annexure –I**

#### **List of members who attended 124<sup>th</sup> Goa-SEAC meeting held on 26<sup>th</sup> June 2020**

- |                                  |                               |
|----------------------------------|-------------------------------|
| 1. Shri. SuhasGodse, Taleigao    | - <i>Chairman (Goa-SEAC)</i>  |
| 2. Dr. C.U Rivonker, Margao      | - <i>Member (Goa-SEAC)</i>    |
| 3. Dr.Nitin S. Sawant, Porvorim  | - <i>Member (Goa-SEAC)</i>    |
| 4. Dr.PurushotamPednekar, Mapusa | - <i>Member (Goa-SEAC)</i>    |
| 5. Shri. Dominic Fernandes       | - <i>Member (Goa-SEAC)</i>    |
| 6. Dr. M.K. Janarthanam          | - <i>Member (Goa-SEAC)</i>    |
| 7. Shri. SanjeevJoglekar, Panaji | - <i>Secretary (Goa-SEAC)</i> |