Minutes of the 122nd Goa State Expert Appraisal Committee (Goa-SEAC) meeting held on 30th May 2020 at 4.00 pm in the Conference Room of the 3rd floor, GTDC, Patto-Panaji, Goa.

The hundred and twenty second meeting of the Goa-SEAC was held on 30^{th} May 2020 in the Conference room of the GTDC, Paryatan Bhavan, Panaji at 04.00 pm under the Chairmanship of Prof. Suhas Godse. The list of members who attended the meeting is at \tilde{o} <u>Annexure – 1</u> \ddot{o} .

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

- Project specific presentation by minor mineral quarry (new_basalt stone quarry) in survey no. 5/1 village Moissal, Dharbandora, Goa by Mr. Ivor Braganza. The consultant Mr. Nishant Kurade presented brief project report of the 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 23rd May 2020.
- a) PP has to submit plan for back filling of existing quarry and area filled and area for open reservoir to be shown on plan.
- b) PP has to submit list of proposed plantations at site.
- Project specific presentation by minor mineral quarry (new_basalt stone quarry) in survey no. 36/1 and 37/0 village Allorna, Pernem, Goa by Mr. Prashant Kamat. 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 22nd May 2020.
 - a) PP has to submit Disaster Management Plan in case of explosive emergency as it is stored at crushing site.
 - b) PP has to submit details of surrounding quarries /cluster of quarries around the site.

- c) All safety measures in storage of explosives must be documented and containers should have hazard signs.
- 3. Project specific presentation by minor mineral quarry (new of basalt stone quarry) in survey no. 30/1 village Muguli, Sanguem, Goa by M/s National Blue Pearl owner Mr. Alex Fernandes. The consultant M/s Joshi Upadhay Associates presented brief project report of the proposed basalt quarry having lease area 5.0 ha. The proposed extraction capacity 80000 cum per annum. The committee conducted site inspection of the proposed site on 23rd May 2020.
- a) PP has to submit plan for back filling of existing quarry and area filled and area for open reservoir to be shown on plan.
- b) PP has to submit list of proposed plantations at site.
- 4. Project specific presentation by minor mineral quarry (new of basalt stone quarry) in survey no. 181/1 village Latambarcem, Bicholim, Goa by Prakash Parodkar. The consultant M/s Joshi Upadhay Associates presented brief project report of the proposed basalt quarry having lease area 2.0 ha. The proposed extraction capacity 30000 cum per annum. The committee conducted site inspection of the proposed site on 22nd May 2020.
 - a) PP has to submit plan for back filling of existing quarry and area filled and area for open reservoir to be shown on plan.
 - b) PP has to submit list of proposed plantations at site.
- 5. Compliances received for construction of New High Court complex at Penha de Franca, Porvorim, Goa proposed by Goa State Infrastructure Development Corporations(GSIDC). Brief details submitted by project proponent is as below:

Sr. No.	Description	Details
1	Name of the project Proponent	Goa state Infrastructure Development Corporation Limited
2	Address for Communication	EDC Complex, 7th Floor, Dr AtmaramBorkar Rd, Panaji, Goa 403001
	Name & location of the project	Construction of High Court Complex at Penha de Franca, Porvorim Goa.
4	Plot Area	29,878 sqm
5	Net plot Area	27,503sqm
6	FSI Area Non-FSI Area Total construction Area Building configuration & Height of the building	16,695.88 sqm 5984.98 sqm 22,680.86 sqm ÉModule 1 - Basement, ÉModule 2, 3 & 4 - Ground + 2 (Part Basement), ÉModule 5- Ground + 1
7	No. of Court halls	7±1 GSI SA
8	Total water requirement (Construction/operation phase)	Construction phase 10 to 20 KLD Operation phase 45 KLD
9	Sewage generation	312m ³ /Daily
10	STP Capacity / Proposed Technology	Combined Effluent and Sewage treatment plant- 50KLD capacity
11	Total Solid Waste Quantities	Construction phase- 1736 m ³ Operation phase- 959 m ³
13	Energy Efficiency	ÉSkylights designed to maximize natural lighting ÉGreen roof to reduce heat gain ÉCourtyard with waterbodies to reduce ambient temperature ÉUse of energy efficient materials like AAC blocks, IG, DGU glazing, etc.
14	Parking 4 W and 2W	4W = 313 2W = 70 Differentially Abled = 05 nos.
15	Power requirement	Construction phase- 7500kW Operation phase- 2486 kW (Photovoltaic system- 100kW connected to the grid)
16	D.G set Capacity	Power backup- DG of 250KVA X 1no.
17	RWH tank capacity	88.60 m ³
18	EMP cost (including DMP cost)	~Rs 22,39,000/-
19	No. of tress on site	290
20	No. of trees to be cut	269

21	No. of tress to be planted on site	154
22	CRZ status	NA

The Committee perused the compliances and after detailed discussion and deliberation decided to recommend the project to Goa-SEIAA for grant of Environmental Clearance (EC) under the provision of EIA Notification 2006, as amended with following <u>specific conditions</u>:

- a. Project Proponent (PP) should necessarily make provision for second vehicular gate to facilitate and exit and ensure safety of judges, advocates, officials, employees and clients in case of an emergency.
- b. Project Proponent (PP) should necessarily make Installation of biogas to treat the biodegradable waste and re_use of biogas in canteen.
- c. Recycling of treated sewage water for flushing and gardening.
- d. Project Proponent (PP) should necessarily make provision of storage of non biodegradable waste.
- e. Plantation of local trees along the southern and eastern compound wall.
- f. 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.
- g. 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.
- h. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
- i. 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.

- j. The Project Proponent shall utilise fly ash bricks in masonry works.
- k. The PP shall use construction debris for land filling wherever applicable.
- 1. 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.
- m. 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 minimize 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.
- n. 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.
- o. 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.
- p. 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.
- q. 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.
- r. 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.
- s. Areas which are marked as **No Development Zone (NDZ)** should be year marked on site and no construction shall be carried out in the said NDZ. Land Profile of NDZ shall not be altered.
- t. No construction shall be carried out in the property which is identified as private forest, if any.

- u. PP should obtain all the requisite permissions/NOCs/Licenses etc from all the competent authorities before commencement of any activity at site.
- 2. <u>Further, the Authority has decided that PP needs to comply to the following</u> "additional specific Conditions":
 - **i.** Sewage Treatment Plant (STP) contract should be for minimum period of 5 years with operation and maintenance contract after commissioning /completion of project.
 - **ii.** PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body.
 - iii.E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
 - **iv.** 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.
 - v. The Project Proponent shall utilise fly ash bricks in masonry works.
 - vi. The PP shall use construction debris for land filling wherever applicable.
 - vii. 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.
 - viii. 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 minimize 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.
 - **ix.** 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.
 - **x.** 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.

- **xi.** 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.
- **xii.** 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.
- **xiii.** 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.
 - **xiv.** 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.
 - **xv.** PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body.
 - **xvi.** E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
 - **xvii.** 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.
 - xviii. The Project Proponent shall utilise fly ash bricks in masonry works.
 - xix. The PP shall use construction debris for land filling wherever applicable.
 - **xx.** 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.
 - xxi. 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 minimize 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.

- **xxii.** 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.
- **xxiii.** 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.
- **xxiv.** 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.
- **xxv.** 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.
- **xxvi.** 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.
- **xxvii.** PP shall make provision for charging points for electronic vehicles in the parking Area.

3. <u>Project Proponent should implement Dust mitigation measures for construction</u> <u>activities such as:</u>

- 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.

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.

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

Dr. Purushotam Pednekar

Sd/-

Dr. NitinSawant

Sd/-

Dr. C.U. Rivonker

_____Sd/-_____

Dr. M.K. Janarthanam

_____Sd/-_____

Shri. Dominic Fernandes

_____Sd/-_____

*Sd/-*Shri. SanjeevJoglekar) (Secretary Goa-SEAC) *Sd/-*Shri. SuhasGodse (Chairman Goa-SEAC) Place: Patto, Panaji Date: May 2020.

<u>Annexure –I</u>

List of members who attended 121st Goa-SEAC meeting held on 26th May 2020

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- 2. Dr. C.U Rivonker, Margao
- 3. Dr.Nitin S. Sawant, Porvorim
- 4. Dr. Purushotam Pednekar, Mapusa
- 5. Dr.M.K. Janarthanam-
- 6. Shri. Dominic Fernandes
- 7. Shri. SanjeevJoglekar, Panaji

- Chairman (Goa-SEAC)
- Member (Goa-SEAC)
- Member (Goa-SEAC)
- Member (Goa-SEAC)
- Member(Goa-SEAC)
- Member(Goa-SEAC)
- Secretary (Goa-SEAC)