Minutes of the 105th Goa State Expert Appraisal Committee (Goa-SEAC) meeting held on 25th April 2019 at 4.30 pm. in the Conference Room of the 3rd floor, GTDC, Patto-Panaji, Goa.

The hundred & five meeting of the Goa-SEAC was held on 25th April 2019 in the Conference room of the GTDC, Paryatan Bhavan, Panaji at 4.30 p.m. under the Chairmanship of Prof. Suhas Godse. The list of members who attended the meeting is at ñ*Annexure – 1*ò.

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

1. Proposed Residential Complex by M/s Trinitas Developers India LLP at survey No 117/1A of Sancolae Village of Mormugao taluka In South Goa District.

Sr.No	Description	Details
1	Name & location of the project	M/S Trinitas Developers India Ltd
2	Plot Area	8000.00 sq.m.
	Net plot Area	**Total Plot Area:**8,000 Sq.m **Deductions**: **Net Plot Area**:7787
4	FSI Area Non-FSI Area Total construction Area Building configuration & Height of the building	**FSI area (sq. m.)**: 15,980.01 sq.m. 32,254.36 sq.m.
5	No. of shops	Construction of 1 building having 4 Wings Total 332 flats 1 BHK- 204 2BHK- 32 Studio-96
6	Total water requirement(Construction/operation phase)	**Total water requirement = 167 cmd** **Fresh Water from PWD = 114 cmd** **Treated Water from STP = 120cmd**
7	Sewage generation	**Sewage generated**: 143 cmd
8	STP Capacity	**STP capacity:** STP of 145 cmdMBBR
9	Total Solid Waste Quantities	**Construction Phase** :1-2 MT/day **Operation Phase** :747 kg/day
10	RG Area	
11	No. of trees	0
12	Energy Efficiency	
13	Parking 4 W and 2W	332 ECS
14	Power requirement	**Source** :GOA State Electricity **Construction Phase** :20HP **Operation Phase** : 3000 KVA DG 2X160 Kg.day
15	D.G set Capacity	2 * 160 KVA (during power failure)
16	RWH tank capacity	

17	EMP cost (including DMP cost)	
18	No. of trees to be cut	Nil
19	No. of tress to be planted on site	50 nos
23	CRZ status	Not applicable

The Committee perused the said compliances dated 06/07/2018 and after detailed discussion and deliberation decided to recommend the said proposal to Goa-SEIAA for grant of EC with following specific conditions.

i. Considering the scale of the project, the PP may consider an appropriate budgetary allocation benefiting the local communities. The details of the same may be submitted to the Authority.

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. 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.

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

xi. bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning, etc. shall be done.

xii. 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.

xiii. 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.

xiv. 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.

2. Proposed hotel project in survey nos 160/1, 159/25 to 30.39,40,41, 49, 50, 51, 66, 68,76,77, 78, 94, 118 to 137 of Varca by Matrix beach venturs.

Background: This office is in receipt of an application forwarded by Goa Coastal Zone management Authority dated 10/09/2018 for examination and appraisal. Accordingly the Goa SEAC conducted site inspection on 10th November 2018 followed with Project Specific presentation during its 104th GCZMA meeting held on 23rd March 2019. The project Proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment including air, land, soil, ecology and biodiversity and social aspects were discussed. Committee noted that the project is under 8a (B2) category of EIA Notification 2006.Consolidated statements, Form I and IA project specific presentation and plans submitted are taken on the record. The said project is appraised as per the Hotel Policy dated 10th June 2011.

Brief extract of the project details submitted by Project Proponent is as below:

Sr.No.	Description	Details
1	Name & location of the project	Construction of beach resort Location: Sy.no.160/1,159/25 to 30,39,40,50,51,66,67,68,76,77,78,94,118 to 137 of Varca Village, SalceteTaluka, South Goa Latitude: 15.216390° Longitude: 73.934212°
2	Plot Area	43,414 m2
3	Net plot Area	Total plot area between HTL and 200 mtr CRZ line: 15,485 m2 Total plot area between 200 mtr CRZ line and 500 mtr CRZ line: 27,929 m2
4	FSI Area Non-FSI Area Total construction Area Building configuration & Height of the building	FSI Area: 14,096.09m2 Total Built up Area: **28,185.98**m2 **Building Configuration:** Basement + 2 floors Height of buildings: 9 mtrs from GL
5	No. of shops	Hotel project consisting of 166 rooms, spa, banquet hall and restaurants.
6	Total water requirement (Construction/operation phase)	Construction phase: 30 KLD Operation phase: 123 KLD
7	Sewage generation	**Construction phase:**Sewage generation: 4.5 KLD **Operation phase:**90 KLD
8	STP Capacity/Grey water treatment plant capacity	Grey water treatment plant of 110 KLD STP of 25 KLD
9	Total Solid Waste Quantities	**Construction phase:** Total Solid Waste: 10 Kg/day **Operation phase:** Total Solid Waste: 256Kg/day
10	RG Area	18,906.79 m2
11	No. of trees	--
12	Energy Efficiency	Solar water heaters, LED lights, Solar lights, Solar PV Panels
13	Parking 4 W and 2W	500 nos. of car parking space
14	Power requirement	500 KVA
15	D.G set Capacity	250 KVA X 2 nos.
16	RWH tank capacity	--
17	EMP cost (including DMP cost)	189.55 Lakhs set up cost 35 lakhs per year recurring
18	No. of trees to be cut	--
19	No. of tress to be planted on site	--
23	CRZ status	Applicable

The committee noted all the details presented by the Proponent and after detailed discussion and deliberation decided to recommend the said project proposal for CRZ Clearance with following Specific conditions:

i. 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.

ii. 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.

iii. PP has to provide additional system for flushing.

iv. PP needs to comply with the provision of construction and demolition of waste management rules 2016 laid down by Ministry of Environment & Forest & Climate change (MOEF & CC).

v. 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.

vi. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. STP of suitable capacity shall be installed considering the quantity / quality of waste water generation.

vii. E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.

viii. The Project Proponent shall utilise fly ash bricks in masonry works.

ix. The PP shall use construction debris for land filling wherever applicable.

x. 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.

xi. 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.

xii. 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.

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. The PP should install an online monitoring system to check water quality of treated water from the STP in consultation with Goa State Pollution Control Board (GSPB).

xv. 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.

xvi. 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.

xvii. PP shall make provision for charging points for electronic vehicles in the parking area and has to provide 500 parking slots for vehicles.

xviii. PP 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 ó107ô 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.

3. Proposed environmental clearance (EC) for modification of the project **Ocean park Residential apartment & commercial shops** at Sy no. 249/1-A Taleigao Plateau, Dona Paula, Goa. The project Proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment including air, land, soil, ecology and biodiversity and social aspects were diPP scussed. Committee noted that the project is under **8a (B2) category of EIA Notification 2006** *(building & constructions)*.Further documents like Consolidated statements, Form I and IA, project specific presentation and plans submitted are taken on the record. However, based on inspection held on 09/01/2019 and subsequent to the project specific presentation, Committee sought compliance. The Committee perused the said compliances dated 06/07/2018 and after detailed discussion and deliberation decided to recommend the said proposal to Goa-SEIAA for grant of EC with following specific conditions.

i. Considering the scale of the project, the PP may consider an appropriate budgetary allocation benefiting the local communities. The details of the same may be submitted to the Authority.

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. 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.

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.

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Dr. Purushotam Pednekar _____***Sd/-***_____

Dr. Nitin Sawant _____***Sd/-***_____

Shri. Dominic Fernandes _____***Sd/-***_____

Dr. Janarthanam _____*Sd/-*_____

Sd/-	*Sd/-*
Shri. Sanjeev Joglekar	**Shri. Suhas Godse**
(Secretary Goa-SEAC)	(Chairman Goa-SEAC)

Place: Patto, Panaji

Date: April 2019