## Minutes of the 91<sup>st</sup> Goa State Expert Appraisal Committee (Goa-SEAC) meeting held on 27<sup>th</sup> February 2018 at 4.30 p.m. in the Conference Room of the EIA Secretariat, O/o Goa State Pollution Control Board (GSPCB), Patto-Panaji.

The ninety first meeting of the Goa-SEAC was held on  $27^{th}$  February 2018 in the Conference room of the GSPCB at 4.30 p.m. under the Chairmanship of Prof. Suhas Godse. The list of members who attended the meeting is at "<u>Annexure – 1</u>".

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

## 1. Proposed District and Sessions Court Complex at Merces, Tiswadi, Goa:

Subsequently, compliances received dated 15<sup>th</sup> February 2018 from **Goa State Infrastructure Development Corporations (GSIDC)** w.r.t. project proposal seeking prior environmental clearance (EC) for Proposed District and Sessions Court Complex in Survey no.40/1 to 17, 41/1 to 15 and 39/1 to 17 at Merces, Tiswadi, Goa having (*plot area 20091.00 sq. mt*) and total built up area of (36524.60 sq. mt). Brief extract of the project details submitted by Project Proponent is as below:

Sr.No.	Description	Details
1	Name & location of the project	Proposed District and Sessions
		Court Complex at Merces, Tiswadi,
		Goa
		Location: Survey no.40/1 to 17, 41/1
		to 15 and 39/1 to 17, Merces,
		Tiswadi, Goa
2	Plot Area	20091.00 m2
3	Net plot Area	19056.801m2
4	FSI Area	FSI Area: 14016.87m2
	Non-FSI Area	Non FSI Area: 22507.73 m2
	Total construction Area	Total Built up Area: 36524.60 m2
	Building configuration & Height of	
	the building	Building configuration & Height of
		the building
		1. Stilt Floor: Parking
		2. First Floor: Parking + Offices
		3. Second Floor: Court rooms, Adv.
		Chambers etc.
		4. Third Floor: Court rooms, Adv.
		Chambers etc.

Chambers etc.			5 Eith Floor Court rooms Adv
No. of shops			5. Fifth Floor: Court rooms, Adv.
Total water requirement(Construction/operation phase: S2.75 CMD Operation phase: 84 CMD Operation phase: S2.20 CMD (Management Plan: Temporary toilet block will be connected to septic tank. Sewage proposed to be disposed at common STP at Patto)  Operation phase: 74 CMD (Management Plan: STP of capacity 100 KLD)  STP Capacity 100 KLD (MBBR Technology).  Total Solid Waste Quantities Construction phase: Total Waste: 25 Kg/day (Will be segregated into Dry & Wet waste)  Dry waste: 10 Kg/day (Recyclable waste will be sol of to scrap dealers, Non recyclable waste will be sol of to scrap dealers, Non recyclable waste will be given to Village Panchayat collection facility.)  Wet waste: 15 Kg/day (Will be given to Village Panchayat collection facility.)  Operation phase: Total Waste: 467 Kg/day (Will be segregated into Dry & Wet waste)  Dry waste: 187 Kg/day (Recyclable waste will be sold of to scrap dealers, Non recyclable waste will be sold of to scrap dealers, Non recyclable waste will be sold of to scrap dealers, Non recyclable waste will be sold of to scrap dealers, Non recyclable waste will be sold of to scrap dealers, Non recyclable waste will be sold of to scrap dealers, Non recyclable waste will be disposed of through the Village Panchayat collection facility)  Wet waste: 280 Kg/day (Will be treated in an automatic Organic Waste Convertor of capacity 150 Kg/day X 2 nos.)  STP sludge: Will be collected in a sludge tank and disposed off as and when required to common STP at Tonca, Panaji. Or at STP at Patto, Panaji		No of share	
requirement(Construction/operation phase: 84 CMD phase)  Sewage generation  Construction phase: 2.20 CMD (Management Plan: Temporary toilet block will be provided. Toilet block will be connected to septic tank. Sewage proposed to be disposed at common STP at Patto)  Operation phase: 74 CMD (Management Plan: STP of capacity 100 KLD)  STP Capacity  Total Solid Waste Quantities  Construction phase: Total Waste:25 Kg/day (Will be segregated into Dry & Wet waste)  Dry waste: 10 Kg/day (Recyclable waste will be sold of to scrap dealers, Non recyclable waste will be disposed of through the Village Panchayat collection facility.)  Operation phase: Total Waste:467 Kg/day (Will be segregated into Dry & Wet waste:)  Dry waste: 18 Kg/day (Will be given to Village Panchayat collection facility.)  Operation phase: Total Waste:467 Kg/day (Will be sed of to scrap dealers, Non recyclable waste will be also of to scrap dealers, Non recyclable waste will be also of to scrap dealers, Non recyclable waste will be disposed of through the Village Panchayat collection facility.)  Vet waste: 280 Kg/day (Will be treated in an automatic Organic Waste Convertor of capacity 150 Kg/day X 2 nos.)  STP sludge: Will be collected in a sludge tank and disposed off as and when required to common STP at Tonca, Panaji. Or at STP at Patto, Panaji			
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	9		Kg/day (Will be segregated into Dry & Wet waste)  Dry waste: 10 Kg/day (Recyclable waste will be sold of to scrap dealers, Non recyclable waste will be disposed of through the Village Panchayat collection facility)  Wet waste: 15 Kg/day (Will be given to Village Panchayat collection facility.)  Operation phase: Total Waste:467 Kg/day (Will be segregated into Dry & Wet waste)  Dry waste: 187 Kg/day (Recyclable waste will be sold of to scrap dealers, Non recyclable waste will be disposed of through the Village Panchayat collection facility)  Wet waste: 280 Kg/day (Will be treated in an automatic Organic Waste Convertor of capacity 150 Kg/day X 2 nos.)  STP sludge: Will be collected in a sludge tank and disposed off as and when required to common STP at Tonca, Panaji. Or at STP at Patto,
10 RG Area	10	RG Area	

11	No. of trees	Plot is devoid of any tree cover.
12	Energy Efficiency	LED lights for common areas, Solar
		street lights
13	Parking 4 W and 2W	326 nos. of car parking space
		(considering visitors parking)
14	Power requirement	Construction phase: 20 KW
		Operation phase: 460 KW
15	RG Area	
16	No. of trees	Plot is devoid of any tree cover.
17	Energy Efficiency	LED lights for common areas, Solar
		street lights
18	Parking 4 W and 2W	326 nos. of car parking space
		(considering visitors parking)
19	Power requirement	Construction phase: 20 KW
		Operation phase: 460 KW
20	D.G set Capacity	1 no. X 220 KVA
21	RWH tank capacity	221.400 KL
22	EMP cost (including DMP cost)	4 Cr
23	No. of trees to be cut	Nil
24	No. of tress to be planted on site	
25	CRZ status	Not applicable

During previous meeting Committee decided to call the representative on behalf of project proponent to give detailed presentation on drainage plan accordingly representative on behalf of Goa State Infrastructure Development Corporations (GSIDC) remained present during the meeting and produced compliance before committee and submitted the letter which is communicated to Public Works Department (PWD), Goa regarding detailed drainage plan and road widening also committee perused the said compliance report submitted by project proponent and after detailed discussions and deliberations, the Committee decided to recommend the proposal to the Authority for the grant of prior environmental clearance (EC) with following specific conditions.

i. Project Proponent should refer the proposed drainage plan to the Water Resources Department (WRD) for their examination and recommendations.

- **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..
- **iv.** E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
- v. 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.
- vi. The Project Proponent shall utilise fly ash bricks in masonry works.
- vii. The PP shall use construction debris for land filling wherever applicable.
- **viii.** 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.
- ix. 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.
- **x.** 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.

- **xi.** 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.
- **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.
- **xv.** PP shall make provision for charging points for electronic vehicles in the parking area.
- xvi. 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 '107' 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.
- 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.
- 2. Sapna Ceramics Pvt. Ltd, the communication received from Goa-SEIAA regarding proposal for prior environmental clearance (EC) capacity enhancement (i.e. from 1,250 tons per day to 2,500 tons per day) by Sapna Ceramics Pvt. Ltd Goa-SEIAA in its communication sought detailed report on amount of material extracted from the date of grant of leases till 31/12/2017 and the environmental damage caused due to the said extraction. Accordingly representative on behalf of Sapna Ceramic was remained present before the Committee, Committee after detailed discussion and deliberation and the oral submissions made by the PP during the meeting decided to forward the details submitted by PP to Directorate of Mines & Geology (DMG), Panaji, Goa in order to confirm whether the same are matching with the records as available with the office of Directorate of Mines & Geology (DMG), with regards to extraction of basalt carried out by PP from date of grant of leases till 31/12/2017.
- 3. Eco Boutique Resort & SPA in the plot bearing Sy. No. 109/1 situated at Betalbatim Village, Salcete Goa by Sane Antao. This office is in receipt of compliances dated 07/02/2018 which were sought during previous Goa-SEAC meeting. Accordingly the Committee perused the compliance forwarded by Project Proponent after detailed discussions and deliberations, the Committee decided to recommend the proposal to the Goa Coastal Zone Management Authority (GCZMA) for the grant of CRZ Clearance 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.** Since Project proponent informed the committee that no tree cutting will be done at proposed site also PP proposes to demolish the existing structure and construct

the new structure at different location in same plot. As such 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).

- **iii.** 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 / wastewater management.
- **iv.** 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.
- 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 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.
- **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.** 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.
- **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 '107' 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.

- 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

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

Sd/	
Sd/	

Sd/Shri. Sanjeev Joglekar)
(Secretary Goa-SEAC)

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

Place: Patto, Panaji Date: March 2018

## ANNEXURE – I

## <u>List of members who attended the 91<sup>st</sup> Goa –SEAC meeting held on 27<sup>th</sup> February 2018</u>

1. Shri. Suhas Godse, Taleigao - Chairman (Goa-SEAC)

2. Dr. Purushotam Pednekar, Mapusa - Member (Goa-SEAC)

3. 6. Dr. C.U. Rivonker ,Talegaon - Member (Goa-SEAC)

4. Shri. Sanjeev Joglekar, Panaji - Secretary (Goa-SEAC)