

**Minutes of the 101st Goa State Expert Appraisal Committee
(Goa-SEAC) meeting held on 19th February 2019 at 4.30 pm. in the
Conference Room of the 4th floor, GTDC, Patto-Panaji, Goa.**

The hundred and first meeting of the Goa-SEAC was held on 19th February 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 Annexure – 1.

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

1. Department of Science & Technology (DST) seeking Terms of References (ToRs) for setting up of a Common Bio-medical Waste Treatment Facility at Kundaim Industrial Estate vide application dated 5th May, 2016 and reminder dated 22nd September 2016. Goa State Expert Appraisal Committee as decided during its 67th meeting held on 7th June, 2016, conducted the inspection on 9th June, 2016 to ascertain site-specific details. Subsequently the matter, after referring model ToRs suggested by the MoEF & CC, was discussed / deliberated during 68th / 69th / 70th / 71st and 73rd meetings held during 16th June / 12th July / 26th July / 29th July and 1st September 2016 and it was impressed upon to visit similar facility operational nearby to understand probable environmental fallouts (i.e. extent of lay-out / details of biomedical waste collection (category wise) and transportation mechanism / Air Pollution Control (APC) measures, etc.). Representative Committee members visited two such facilities operational in Pune. Subsequently post inspection observations were discussed during 74th Committee meeting held on 15th September 2016 to finalise the Terms of References (ToRs) and ToRs were communicated to the DST for further needful vide letter no. 3/181/2012/STE-DIR/Part I/EIA-GOA/36 dated 28th September 2016. The PP vide letter no. 119-10-2015/STE-DIR/Part I A/SWMC/170 dated 4th October 2016 has requested to clarify the nature of EIA to be conducted. The matter was taken up for discussion / deliberation during 80th SEAC meeting held on 22nd November 2016 and it was decided that the PP needs to undertake comprehensive EIA for the aforesaid project activity. Accordingly, the PP has been sent an e-mail communication on 2nd December, 2016.

This office is in receipt of EIA report dated 24 /12/2018 from Goa Waste Management Cell. The committee conducted site inspection on 13th January 2019. Accordingly the committee conducted site inspection and proponent is called for project specific presentation. The officials from Goa Waste Management Corporation (GWMC) presented the presentation before the committee. However the committee was of the opinion to redesign, remodelled and relocate to save trees and redesign the incinerators capacity to 300kg/hr based on present waste generation scenario and further make the presentation before the committee.

2. With reference to the communications received from the Authority (Goa-SEIAA dated 25th September 2018 with regards to proposed developmental activity in Sancoale area by M/s **Umia Developers Pvt. Ltd.**, the authority sought a report and confirmation from Goa-SEAC whether the construction is as per the recommendation of Goa-SEAC within 10 days. During 97th Goa-SEAC meeting held on 27/09/2018 committee decided to conduct site inspection of the proposed site. Accordingly the committee inspected the site on 29/09/2018 and sought compliances with regards to STP .Further Goa-SEAC visited the proposed site on 10/11/2018 to verify the compliances submitted by PP based on observations during previous inspection. The committee after perusing the compliances 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 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 at least 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.

3. To decide on Proposed construction of building and construction project at chalta No. 98 & 93 Panaji City Goa" by **Green land co-operative Society Ltd**". During 94th Goa-SEAC meeting held on 14/06/2018 M/s Excel Envirotech consultancy, Goa made the project-specific presentation on behalf of PP w.r.t. project proposal seeking environmental clearance (EC) for above project. During said meeting the committee sought various compliances which was submitted by the project proponent on 17/10/2018. The Committee perused the said compliances 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 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.

The meeting ended with vote of thanks to the Chair.

Dr. Purushottam Pednekar _____ *Sd/-* _____

Dr. C.U. Rivonkar _____ *Sd/-* _____

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

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

Place: Patto, Panaji, Goa.

Date: February 2019

ANNEXURE – I

List of members who attended the 101st Goa –SEAC meeting held on 19th February 2019

1. Shri. Suhas Godse, Taleigao - *Chairman (Goa-SEAC)*
2. Dr. Purushottam Pednekar, Mapusa - *Member (Goa-SEAC)*
3. Dr. C.U. Rivonker, Margao - *Member (Goa-SEAC)*
4. Shri. Sanjeev Joglekar, Panaji - *Secretary (Goa-SEAC)*