

**Minutes of the 88<sup>th</sup> Goa-SEAC meeting held on 21<sup>st</sup> December 2017 at 02.30 p.m. in the Conference Room of the EIA Secretariat, O/o Goa State Pollution Control Board (GSPCB), Patto.**

The 88<sup>th</sup> Meeting of Goa-SEAC was held on 21<sup>st</sup> December 2017 in the Conference room of the GSPCB at 02.30 p.m. under the Chairmanship of Prof. Suhas Godse. The list of members who attended the meeting is at “*Annexure – I*”.

At the outset, Chairman welcomed all the members and requested Secretary, (Goa-SEAC), Shri. Sanjeev Joglekar to proceed as per the Agenda items (*refer Annexure – 2*).

**1. M/s Mahadhan Real Estate LLP.,** Proposed construction of Residential-cum commercial building with compound wall in S. Nos. 99/1 & 2, 105/1, 2 & 3 – C3 in Taleigao village, Tiswadi taluka. The Project Proponent (PP) Resubmitted revised proposal on 5th June 2015 for reconsideration. Site was inspected earlier and was directed to resubmit the revised proposal with compliance to site-specific / presentation-specific observations. To be called for afresh project-specific presentation. The lease holder has cancelled the project-specific presentation which was fixed twice – firstly on 26th November 2015 (i.e. 54th meeting) and then during 56th SEAC Meeting scheduled on 17th December 2015. Subsequently, based on the request received dated 2nd March 2016 from the Project Proponent (PP), the Committee has decided to invite the PP for project-specific presentation during its 61st meeting scheduled on 17th March 2016. However, the PP has officially communicated its inability to make presentation during the meeting on 17th March 2016 and requested for its postponement. Thereafter, PP made the project-specific presentation during 62nd Committee meeting held on 5th April 2016. Subsequently, following post-presentation discussions / deliberations held during 63rd meeting held on 7th April 2016, the aforesaid proposal has been recommended by the Committee with mandatory inclusion of following as ‘Specific conditions / Mitigatory prescriptions’.

a. The top soil layer at the site upto a depth of 0.30 mt. should be removed and reused after the filling of the site with soil transported from elsewhere as submitted before the Committee by the PP. The soil to be filled should also be tested and report should be furnished to the Authority.

b. As the site is a low-lying fallow-land with sandy soil and shallow groundwater table and in anticipation of flooding conditions in heavy monsoon during construction and post construction scenarios, the storm water drainage from the site in no condition be allowed to flow in surrounding fields. The detailed design analysis of the storm water management plan vis-à-vis extreme scenarios of heavy rainfall conditions with available data along with the proposed outfall in the nearest natural drain should be prepared and submitted.

c. Further, considering 17 mts. deep clay layer at the site (as per the soil investigation report submitted), the PP should adopt appropriate foundations for the structures at the site so as to transfer the load to hard stratum and based on seismic considerations.

d. A disaster response for flooding conditions should be prepared and submitted.

e. Considering the site-specific characteristics of the project location and its topography, the PP should take all the remedial measures to address water drainage system so that locations around the proposed site do not get inundated / flooded during and after the project completion.

Later, compliances w.r.t post-presentation observations submitted by the PP was perused / deliberated during 66th SEAC meeting held on 5th May 2016 wherein it was noted partial non-compliance. Accordingly, PP was directed to authenticate said compliance with additional compliance to

(i) Submission of letter regarding appropriate foundation for the proposed developmental activity so as to transfer the load to hard stratum in response to on-site soil condition and seismic vulnerability. Further and as decided, the site was re-inspected on 20th May 2016 to ascertain / verify provisions proposed to be adapted

(a) To control / manage probability of flooding likely to be caused during heavy monsoon, especially during the construction and post-construction scenarios and

(b) For storm water management.

During the re-inspection, it was observed that the nallah depicted on the survey plan was found to be clogged with construction debris / vegetation and has compromised drainage capacity. The follow-up of the said inspection was discussed during 67th meeting held on 7th June 2016 and

considering the likelihood of inundation in the event of high precipitation as also due to high water table and hydric nature of the soil as well as proposed landfilling of low-lying area within the proposed plot, the Committee has recommended that the PP takes adequate mitigative measures prior to commencement / during as well as post-construction phases. This is with specific reference to

- (a) Inundation of the main road,
- (b) Water logging in the adjoining agricultural fields and
- (c) Stagnation of water leading to public health hazards.

Accordingly, the onus of ensuring a smooth drainage of storm water through the nallah as proposed shall entirely lie with the PP during pre-construction / construction / post-construction phases. As such, the Committee has recommended the proposal with observation as above. Later, The Authority during its 31st meeting held on 8th July 2016 perused above-referred SEAC's observations with specific reference to (a), (b) and (c) and made the following observations. (i) The proposed site / area is low-lying agricultural field and as such, forms water catchment for rain-water / storm-water. (ii) It is a marshy land and sustains growing of local vegetable & biodiversity. (iii) There is a great apprehension that filling / reclamation of land in uncontrolled manner will lead to unprecedented flooding of nearby areas causing health-hazards and epidemics. In addition, it may lead to instability of proposed structure considering a deep clayey layer on site. Accordingly, the Authority decided to refer the proposal and communicated the same on 18th August 2016 to the Town and Country Planning (TCP) Department so as to ascertain and clarify with adequate hydrological and rainfall data as to whether it is advisable to undertake such a land-filling / reclamation for the construction activity as proposed by the Project Proponent (PP). The Authority will decide after receiving feedback from the TCP. Further, the PP vide request dated 1st August 2016 has requested for personal hearing before the Authority to appraise the said matter. As per the request by the Project Proponent Authority decided to give personal hearing to the project proponent before Goa-SEAC, Further SEAC is requested to ascertain the following facts before recommending the proposal to Goa-SEIAA.

- i. It is noted that as per the soil investigation report submitted by PP Project specific site has 17 mt of clay layer.

- ii. ii. The proposed site is a low lying agricultural field and as such it forms water catchment for rainwater.
- iii. iii. The site is a marshy land and sustains growing of local vegetables and is rich in biodiversity.
- iv. iv. The Earlier Goa-SEAC/SEIAA had strong apprehension that filling /reclamation of land in massive manner will lead to unprecedented flooding of nearby habituated areas. It may also cause health hazard and epidemic due to stagnant water during rainy season. Constant flooding may also cause instability of proposed structure during rainy season.
- v. Goa-SEAC may re-inspect the site if required.

Accordingly Committee decided to inspect the proposed site to check ground reality as on now at site, Accordingly, Committee inspected the proposed site on 20<sup>th</sup> December 2017 and informed applicant to present detailed project presentation before committee on 21<sup>st</sup> December 2017, accordingly representative of M/s Aditya Environmental Services, Goa (NABET/QCI-accredited environmental consultant), on behalf of applicant made the project-specific presentation before Committee, subsequent to the presentation Committee decided to refer the proposal and communicate the same to the Water Resources Department (WRD) so as to examine and clarify with storm water management plan as proposed by the Project Proponent (PP).and further decided that Committee will decide after receiving feedback from the WRD.

2. **Goa Solid Waste Management Cell** application received dated 06/12/2017 for environmental clearance (EC) for proposed enhancement of existing capacity from **100 TPD to 250 TPD +20% of** the solid waste management facility of solid waste Management plant at Saligao, Bardez, Goa. Committee conducted site inspection of the proposed site on 16<sup>th</sup> December 2017. During inspection it was noted one cell of the landfill has been constructed and 25% has been utilised for inert waste. The committee during inspection also observed that the operator has remediated the existing waste dump site RDF generated has been disposed and same has been stacked on site. During presentation Shri. Dominic Fernandes (Expert Member) Goa-SEAC has recused himself from the discussion particularly during this Agenda item. Managing Director, Goa Waste Management Cell Corporation, Shri. Sanjith Rodrigues made detailed presentation

before the committee of the proposed enhancement of existing capacity from **(100 TPD to 250 TPD +20%)** of at Calangute. The in additional equipments proposed like

1. **Organic Extrusion Press**

2. **Twister for processing of segregated organic waste** for feeding onto the fermenters the proposed twister can be an independent stream for handling the biodegradable organic waste . The proposed capacity of the twister shall be 10 TPH

3. **Filter screw press (FSP)** followed by sedimentation tank for removal of grit/ Beach sand and low micron plastic screening unit

4. **Bio methanisation** system consisting of buffer tank and fermenter

5. **sludge dewatering units**

4. **RDF line** consist of RDF drums, conveyors

5. **Multi deck vibratory screens** and RDF storage shed,

6. **ETP plant** for upgradation to 250 TPD, biogas Genset based power plant consisting of Gas holder, H2S gas scrubbing system, Gas Engine, Gas flare & its associated components, one DG sets of 100 KVA capacity,

7. **Mobile Equipments** Front End Loader (2 nos), Skid Steer Loader(4 nos), Trucks with Tanker (2 nos), Tractor (2 nos), Truck with grit suction Tanker arrangement (2 nos), RDF, Recyclable & compost storage shed, Tree Mulcher, Thermocol & styrofoam Compactor will be added to compact the thermocol & styrofoam which being received at the plant. The Managing Director further clarified that they do not intend to extend or there is no existing landfill at the proposed site and will utilize the existing landfill for disposal of inert waste generated after processing the solid waste. The Managing Director further informed that inert waste is analysed and the analysis report shows that there is no hazardous constituents' .Hence the inert waste is to be used and proposed to be used for reclamation.

Road, utilities, power, water, buildings, sheds which are necessary for the completeness of the plant upgradation to 250 TPD.

Further, Committee perused the monthly performance reports including summary of performance standards as prescribed in the concession agreement. The committee also perused Environmental Monitoring for common Municipal solid waste Management facility (CMSWMF) at Calangute/Saligao in North Goa based on earlier EC issued by Authority. submitted by NEERI

The committee noted that MOEF & CC has issued the OM dated 7<sup>th</sup> November 2017 wherein the MOEF has clarified that the municipal solid waste management involves various steps like door to door collection, segregation, composting, refuse derived fuel (RDF) making waste to energy generation through waste to energy plants and disposal in scientific landfills. The above activities, except landfill site, if proposed as standalone activities are not covered under item 7 (i) of EIA Notification 2006, hence do not require prior EC. In case the activities of composting, RDF making and waste to energy plant (up to Capacity of 15 MW) are proposed at an existing landfill site, they do not attract the provision of the EIA notification 2006.

In view of the OM dated 7<sup>th</sup> November 2017 issued by MOEF & CC which specifies that provision of the EIA Notification 2006 are not attracted if the treatment facility proposed at existing landfill site or stand alone proposed site proposed site for expansion would not attract the provision of EIA notification as the said project for expansion proposed on an existing landfill and no expansion of landfill is proposed the project only envisages segregation of waste and treatment of bio medical waste through bio methanation including generation of biogas and electricity from biogas , However the committee decided to recommend the following additional conditions to the EC issued earlier by the authority.

1. All new waste shall also be handled under closed sheds with proper lighting and ventilation arrangement.
2. Provision shall be made to segregate and recycle the additional waste in the Material segregation and recycling center.
3. The Biodegradable Organic Waste shall be treated using additional Bio-methanation and composting units including Fermenter tanks, Gas holder, Biogas Genset based Power Plant along with all associated units.
4. The facility shall also have provision of handling waste coming with beach sand/ street sweeping grit.

5. Water requirement to the facility shall be augmented from 10 KLD to 50 kld. Also it is proposed to utilize recycle water as per the need.
6. Upgradation of Existing Effluent Treatment Plant shall be done to handle 500 cum/day.
7. An additional DG Set for 1000 KVA shall be provided for Power backup.
8. The existing Electrical & Instrumentation Works shall be augmented as per requirement.
9. A separate storage shed shall be provided to store RDF, Recyclable & Compost.
10. A separate Tree Mulcher shall be added to mulch green cuts and garden waste.
11. Thermocol & Styrofoam Compactor will be provided to compact the thermocol & Styrofoam.
12. The other necessary infrastructural works such as Roads, utilities, power, water, buildings, sheds, green belt development, Rain water Harvesting system, CCTV cameras, fencing, street lights, bio-filter which are necessary for the completeness of the plant upgradation to 250 TPD shall be provided.
  
13. The existing old dump waste of approximate 25000 tons which is lying adjacent to the plant facility needs to be remediated to recover recyclables, compost, inert and RDF. The recovered components shall be scientifically disposed and the land shall be made free of dump or any recovered components within next three years excluding Monsoon period
  
14. A proper drainage system shall be provided to convey the wash water & spillage from the existing as well as from the proposed units of the facility, to the proposed ETP. There shall be no spill over of such effluent into the Storm water drain. The Storm water drain shall be specifically for the rain water system and it shall be free from any effluent / wash water at any point of time.

The meeting ended with vote of thanks to the Chair.

**Shri. Dominic Fernandes**

\_\_\_\_\_ Sd/- \_\_\_\_\_

**Dr. Nitin S. Sawant**

\_\_\_\_\_ *Sd/-* \_\_\_\_\_

**Dr. C.U. Rivonker**

\_\_\_\_\_ *Sd/-* \_\_\_\_\_

**Prof. M.K. Janarthanam**

\_\_\_\_\_ *Sd/-* \_\_\_\_\_

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

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

Place: Patto, Panaji  
Date: December 2017



## ANNEXURE – I

### **List of members who attended the 88<sup>th</sup> Goa –SEAC meeting held on 21<sup>st</sup> December 2017**

- |                                     |                        |
|-------------------------------------|------------------------|
| 1. Shri. Suhas Godse, Taleigao      | - Chairman (Goa-SEAC)  |
| 2. Shri. Dominic Fernandes , Panaji | - Member (Goa-SEAC)    |
| 3. Dr. Nitin S. Sawant, Porvorim    | - Member (Goa-SEAC)    |
| 5. Prof. M.K. Janarthanam, Taleigao | - Member (Goa-SEAC)    |
| 6. Dr. C.U. Rivonker ,Margao        | - Member (Goa-SEAC)    |
| 7. Shri. Sanjeev Joglekar, Panaji   | - Secretary (Goa-SEAC) |