

**Minutes of the 62nd Goa State Expert Appraisal Committee
(Goa-SEAC) meeting held on 5th April 2016 at 10.30 a.m. in the Conference
Room of the Goa State Pollution Control Board (GSPCB), Patto.**

The sixty-second meeting of the Goa-SEAC (*hereinafter termed as 'Committee'*) was held on 5th April 2016 at 10.30 a.m. in the conference room of the Goa State Pollution Control Board (GSPCB) under the Chairmanship of Mr. Antonio Jaime Afonso. The list of members who attended the meeting is given in "Annexure – 1".

At the beginning Dr. Mohan R. Girap, Secretary, Committee welcomed the Members and appraised about the matters to be taken up for discussion / deliberation (refer Annexure – 2).

1. As per the decision taken during the last Committee meeting held on 17th March 2016 (*i.e.* 61st meeting), M/s Aditya Environmental Services, Goa (*NABET/QCI-accredited environmental consultant*), on behalf of **M/s Trinitas Developers LLP**, Sancoale, made 'pre-ToR project-specific presentation' prior to initiate EIA study for the proposed construction of a residential-cum-commercial complex at survey no. 198 of Sancoale village in Mormugao taluka.

Subsequently, after post-presentation deliberation, the Committee finalized the Terms of Reference (ToRs) as given in Annexure – 3. Accordingly, it was decided to communicate the same to the Project Proponent (PP).

2. Later, M/s Aditya Environmental Services, Goa (*NABET/QCI-accredited environmental consultant*), on behalf of **M/s Mahadhan Real Estate LLP., Vasco-da-Gama** made the project-specific presentation. It is informed that the PP is seeking environmental clearance (EC) for proposed construction of residential-cum-commercial building in survey nos. 99/1 & 2, 105/1, 2&3 – C3 in Taleigao village, Tiswadi Taluka.

However, prior to the said project-presentation, Dr. Mohan R. Girap, Secy., Committee appraised that the aforesaid proposal has been re-submitted by M/s Mahadhan Real Estate LLP in response to Committee observations made during 22nd meeting held on 13th May 2014 and its subsequent approval by the Goa State Environment Impact Assessment Authority (*i.e.* Goa-SEIAA – *hereinafter referred as 'Authority'*) during 13th meeting held on 31st July 2014.

Accordingly the PP, if desired, was directed to re-submit the proposal ‘afresh’ for re-appraisal by the Authority and it should include the compliance to below-referred observations –

- a. Existing land use / land cover and likelihood impacts due to proposed construction activity.
- b. The nature of landform - i.e. accumulation of sand-sized soil and its conservation, if any, present within the project site.
- c. Agro-diversity inventory within 2-Km radius of the site and floral and avifaunal inventory at the project site to rule out species of conservation concern, if any.
- d. Details of Solid Waste Management plan and sewage treatment plant.
- e. Submission of Geo-technical soil report as well as geo-hydrological studies of the project site.
- f. Measures proposed to be undertaken towards storm-water management / land reclamation, if any.
- g. Setback in respect of access around the building should have pay load of 30 metric tons.
- h. Submission of fire risk management and Disaster Management Plan (DMP).
- i. Compliance to Office Memorandum (O. M.) issued by the Ministry of Environment and Forests (MoEF) dated 18th May 2012 in respect of institutionalizing Corporate Environmental Responsibility (CER).

Following the project-presentation, the Committee noted that the PP has not altered / modified the civil developmental plan (*i.e. construction*) which was appraised by the Committee / Authority earlier during 2014 and has addressed the above-referred observations during the current presentation / proposal. However, the Committee decided to deliberate / discuss on the matter in detail during its next meeting (*i.e. 63rd*) scheduled on 7th April 2016.

3. Further, in response to the letter submitted by **M/s Bharma S. Wadar** dated 2nd March 2016, it was informed that the O/o EIA Goa State Secretariat had received two proposals – one for ‘renewal’ of existing lease (*no. 07/Basalt/06 with lease area of 4,000 sq.mts.*) and another forwarded through M/s Sadekar Enviro Engineers Pvt. Ltd., Panaji for ‘new’ lease *with lease area of 13,650 sq.mts.* – both located in survey no. 38/0 of Allorna village, Pernem taluka. The Committee had conducted the site-inspection on 27th October 2015. Accordingly, the lease holder / environmental consultant – M/s Sadekar Enviro Engineers Pvt. Ltd., Panaji was directed to clarify the ambiguity w.r.t. proposals concerned for further appraisal. Accordingly, the Committee decided to forward the said communication to the O/o North Goa District Collectorate, Panaji for further appraisal / consideration in response to Notifications published by the Ministry of Environment, Forests and Climate Change (*MoEF &CC*) vide Gazette of India – ‘Extraordinary’ namely – (a) S.O. 141 (E) – PART II, Section 3, Sub-section (ii) dated 15th

January 2016 and (b) S.O. 190 (E) – PART II, Section 3, Sub-section (ii) dated 20th January 2016.

The meeting ended with vote of thanks to the Chair.

Dr. Manoj Borkar _____ *Sd./-* _____

Mrs. A.A.B. Barreto _____ *Sd./-* _____

Mrs. Ashwini Pai Panandiker _____ *Sd./-* _____

Dr. P. K. John _____ *Sd./-* _____

Mr. Suhas Gaonkar _____ *Sd./-* _____

Dr. Jagannath Hirkude _____ *Sd./-* _____

Sd./-
Dr. Mohan R. Girap
Secretary, Goa-SEAC

Sd./-
Mr. Antonio Jaime C. Afonso
Chairman, Goa-SEAC

Place: Patto, Panaji
Date: April 2016

**ToRS OF REFERENCE (TOR) FOR CONDUCTING EIA/EMP REPORT
FOR CONSTRUCTION PROJECT PROPOSED BY M/s. Trinitas Realtors
India LLP**

(proposed construction of a residential-cum-commercial complex at survey no. 198 of Sancoale village in Mormugao taluka)

EIA / EMP report should address the following –

- 1) Submit the details of land use of the proposed site as per the recent approved Master Plan / Regional Plan / ODP. Land title / acquisition & status of land conversion documents – ‘Sanad’ shall also be submitted. Also, submit the details of land use categorization around 10-kms. radius of the project site, preferably using Google image. In addition, Analysis should be made based on latest satellite imagery for land use / land cover classification with raw images as well as ground-truthing. Conduct slope analysis and submit existing storm water drainage pattern at the site, especially during monsoon and post-monsoon seasons.
 - 1a. considering the proximity of Sancoale / Chicalim Bay - an eco-sensitive marine ecosystem, to the project site, likely impacts of the project on the former at all the levels of EIA and its multiple functional areas be evaluated and submitted.
- 2) Submit details of environmentally sensitive places, rehabilitation of communities / villages, present status of such activities and pertinent demographic data at the site. Particular emphasis shall be given on submitting details on existing population density in the panchayat area and the projected change post-occupancy.
 - 2a. Since the proposed site is a lateritic plateau, the Ephemeral Flush Vegetation (EFV) be documented and inventory of Plateau Fauna with particular emphasis on Batracofauna and Herpetofauna be compiled based on primary sampling. Avifaunal listing with IWPA Schedules and IUCN Categories be prepared based on one season primary data. All biodiversity inventories (*except EFV*) shall be based on actual sampling in the post-monsoon season. In the event of presence of IWPA Schedule-I species, requisite conservation plan be prepared in consultation with the Chief Wildlife Warden (CWW), Government of Goa, and submitted.
 - 2c. Enumeration and listing of existing trees at the site highlighting species of conservation concern, if any, be carried out and submitted. Submit the details of the trees to be felled for the project along with necessary permits granted by the concerned authorities.
- 3) Examine baseline environmental quality (*as detailed in point no. 4 below*) along with projected incremental pollution load due to the proposed project.

- 4) Environmental data, to be considered in relation to the project development, shall be with reference to : (a) land, (b) groundwater, (c) surface water, (d) air, (e) noise and vibrations, (f) socio-economic and health. These details shall be furnished for the last 05 years including current baseline data. Wind-roses for the area should be prepared while estimating impact air quality.
- 5) Submit stage of ground-water development in the area / classification as per the Central Ground Water Authority / Notification(s) published by the Water Resources Department (WRD), if any.
- 6) Examine / specify the details of source of water, water requirement, use of treated waste water, prepare a water balance chart and submit letter / NOC / approval from the competent authority as regards to provision of water supply to the proposed site during construction and occupancy phase.
- 7) Examine and submit the soil characteristics and depth of ground water table (*i.e. Hydrogeological survey*) for rainwater harvesting. Such proposals should be made with due safeguards for ground-water quality. In addition, provide technical details on recycling of water and utilization of rain water.
- 8) Examine per capita and cumulative projected solid waste generation and submit solid waste treatment and its disposal plan during construction / occupancy. A dedicated plan for construction debris management and disposal during and after occupancy in compliance with the provisions of the '**Construction and Demolition Waste Management Rules, 2016**' shall be submitted.
- 9) Prepare 'shadow analysis' diagrams and examine building orientation to take optimum advantage of solar shading and natural lighting.
- 10) Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Provide technical details on energy conservation and energy efficiency as well as details on installation of system for HVAC.
- 11) Examine and submit details of emissions from DG sets during construction and operational phase of the project. These factors must be taken into consideration while estimating the impacts on air quality.
- 12) Provide technical details on Fire safety provisions in the building, evacuation procedures and assembly points. Emergency Response Team (ERT) and equipments availability for first response by ERT shall also be explicitly mentioned. Exclusive water storage facility for the fire-fighting system should be provided as per NBC regulation (*i.e. 2,00,000 liters*).

- 13) Examine and submit road connectivity to the project site during construction and post-construction phases and impact on the vehicular movement and traffic due to the proposed project. Present and projected traffic and transport scenario for the area should be analysed technically (*i.e. Traffic Management Plan*).
- 14) Examine the details of source and transport of raw materials (*metals / building stones / cement*) for construction vis-a-vis provision for its on-site storage.
- 15) Examine the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- 16) Submit details of a comprehensive Disaster Management Plan (DMP) including emergency evacuation during natural and man-made disaster.
- 17) Details of litigation pending against the project, if any, with direction / order passed by any Court of Law against the Project should be given.
- 18) The cost *vis-a-vis* budget estimate towards implementation of EMP should be clearly spelt out.
- 19) Submit roles and responsibility of the Developer / Project Proponent (PP) for compliance of environmental regulations under the provisions of Environment (*Protection*) Act, 1986.
- 20) Provide information about development project currently ongoing / proposed / completed within the peripheral zone of 1 -2 kms from the proposed site. If so, likelihood comprehensive / integrated impact on the said activity be detailed-out.
- 21) As per the provision of the NBC (*revised*) applicable for high-rise buildings, it is mandatory to obtain NOC from the Directorate General of Civil Aviation (DGCA) owing to the proximity of the Dabolim airport to the proposed site.