

**GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY**

**EIA-Goa State Secretariat,**

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No: 3 – 181 – 2010/STE-DIR/ 23

Date: 5<sup>th</sup> August 2016

**To,**

**M/s Trinitas Realtors India LLP,**

Floor 8, Muttha Chamber,

Senapati Bapat Marg,

Pune -411016

**Sub.:Proposed Residential cum Commercial complex in Survey No. 198/1 of Sancoale village, Mormugao taluka, Goa by M/s Trinitas Realtors India LLP – reg.,**

**Ref: (1) This office letter no. No: 3 – 181 – 2010/STE-DIR/21 dated 4<sup>th</sup> August 2016.**

*Sir,*

In partial correction of our letter referred at Sr.No. (1) above at page 3 of the letter under the item at Sr.No. (7) under the heading **Waste Water Generation** the word ‘SBR’ appearing in first line may instead be corrected and read as ‘MBBR’.

Further, other contents of the said letter remains unchanged.

*Yours faithfully,*

**Sd/-**

**(Vikas .S.N. Gaunekar)**

**Director/ex-officio Jt. Secy.**

**Environment &**

**Member Secretary, Goa-SEIAA**

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To,

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**Sub.: Proposed Residential cum Commercial complex in Survey No. 198/1 of Sancoale village, Mormugao taluka, Goa by M/s Trinitas Realtors India LLP – reg.,**

Sir,

I am directed to refer to your application (*i.e. Form-I, Form-1A*) dated 12<sup>th</sup> February 2016 seeking prior Environmental Clearance (EC) as mandated in the EIA Notification, 2006 (*as amended till date*) for proposed development of residential-cum-commercial complex in Survey No. 198 of Sancoale village, Mormugao taluka, Goa. Accordingly, the above proposal has been appraised under ‘**8(b) – B2 category**’: *Building and construction project* on the basis of the documents enclosed with application by the Goa State Expert Appraisal Committee (*Goa-SEAC - hereinafter referred as ‘Committee’*). Subsequently, the Committee conducted the site-inspection on 01<sup>st</sup> March 2016 and thereafter the Project Proponent (PP) through M/s Aditya Environmental Services, Goa. (*NABET/QCI-accredited environmental consultant*) made the project-specific presentation during its 62<sup>nd</sup> meeting held on 05<sup>th</sup> April 2016 seeking Terms of References (ToRs’) to conduct EIA study for the project. Further, the Committee issued Terms of References (ToRs’) *vide letter no. 3/181/2012/STE-DIR/Part-I/EIA-Goa/06 dated 13<sup>th</sup> April*. Later, project Proponent *submitted EIA report on 19<sup>th</sup> July 2016* and on subsequent perusal of the EIA report during its consecutive meetings, (*i.e. 70<sup>th</sup> meeting held on 26<sup>th</sup> July 2016 and 71<sup>st</sup> meeting held on 29<sup>th</sup> July 2016*) the Committee noted that the submitted document is a compilation of data of rapid EIA covering summer and 1<sup>st</sup> phase of monsoon season. The Consultant addressed all the points raised in the ToRs’ in various functional areas necessary for environment impact appraisal. The Committee has noted that the EIA report is replete with

relevant technical details and recommended the proposal for grant of environmental clearance (EC) to this Authority.

Thereafter, the Authority deliberated on Committee's recommendations vis-a-vis verified the compliances/EIA report submitted by the PP, during its 33<sup>rd</sup> meeting held on 2<sup>nd</sup> August 2016 and decided to grant prior environmental clearance for the proposed developmental activity subject to the specific conditions to be incorporated in EC which are stated below:

1. Considering the scale of the construction proposed the movement of heavy vehicles and building materials during construction phase to the site shall be strictly during non-peak hours.
  2. The phase-wise construction plans / schedule be submitted to the Authority.
  3. Efficient construction debris management system during construction phase be prepared and submitted at the time of post-EC compliance.
  4. All sources of sediments at the site shall be effectively contained and handled avoiding its discharge into storm-water drainages on site during construction phase.
  5. All avenue plantations shall be done prioritizing local species ensuring a good sapling survival rate. The landscape work may be undertaken simultaneously with the construction of the project.
  6. As submitted by the PP in the EIA report, the necessary recommendation in terms of road alignment to be incorporated to reduce accident hazards.
  7. Any pertinent observation in the scope of environmental safety and protection, not covered in the EIA submitted by the PP, however observed at any phase of construction must be immediately reported to the Authority for requisite intervention / action in the matter.
  8. 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.
1. Project details and salient features of the proposed developmental activity, as submitted by the proponent, is as under –
1. **Total plot area – 1,28,925 Sqmts.**

- a. Area under Settlement Zone -1,18,795 sq.mts.
- b. Area under Commercial Zone – 10,130 sq.mts.
- 2. **Total built up Area – 2,00,802.60 sq.mts.**

- 3. Height of building – 24 mts (*Commercial*) +15 mts + stilt (*residential zone*)
- 4. Expected occupancy – 11,287 nos. of people
- 5. Parking Proposed – 2164 *residential* + 249 *Commercial*= Total Parking=2413.

6. **Water requirement:**      **Source- PWD and water tankers.**

- a) **During construction phase – 73 CMD** (37CMD for domestic 21 CMD for flushing and 15 CMD for construction)
- b) **During operational phase – 2285.33 CMD** (1109.42 CMD is fresh source and 1175.91 CMD is STP-treated water).

7. **Wastewater generation** – 1433 CMD to be treated in SBR-based 1480 -KLD capacity STP. It will generate 1175 CMD of treated water (483 CMD for sewer line & 340CMD for landscaping 0.75 kg. of dry sludge /day will be generated.

8. **Solid waste generation** –

- e. During construction phase – 0.22 tones of solid waste /day
- f. During operational phase – (1669 kg/day of Biodegradable and 2,243 kg/day non-biodegradable).

9. **Power requirement** –

- e. Construction phase – **250 KW**
- f. Operation phase – **22,799.40 KW** through GEL  
Back-up power through (a) 5 D.G. sets of 500 KVA capacity each) and (b) 1 D.G. set of 250 KVA capacity.

Accordingly, the Authority has decided to grant prior environmental clearance (EC) to the said project under the provision of the Environment Impact Assessment (EIA) Notification, 2006; subject to compliance to the following “**General Conditions**”:-

- cc. The PP should use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- dd. *Solar power generation* - Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, 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 as and when made applicable in future. In addition, south-facing walls to be utilized to install solar panels to harness optimum solar

energy. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heater system. PP should install, after checking feasibility, solar-plus-hybrid non-conventional source as source of energy.

- ee. PP should adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
- ff. 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.
- gg. PP should not disturb the natural drainage and as far as possible and maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.
- hh. PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization / zoning.
- ii. PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- jj. This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgements / Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified.
- kk. PP should ensure and ascertain that '**civil plans**' which were submitted to this Authority during the process of project appraisal be submitted to other line Departments / agencies concerned while seeking NOC / Consents, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.
- ll. 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.
- mm. E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.

- nn. This environmental clearance is issued subject to obtaining NOC from the Forestry & Wildlife angle including clearance from the Standing Committee of the National Board for wildlife, if applicable. This environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project, which will be considered separately on merit.
- oo. The height, construction gross built up area of proposed construction is **2,00,802.60 Sq.mts** shall be in accordance with the existing FSI/ FAR norms of the urban local body and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- pp. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.

Further, the PP is advised to comply with the following **“General Conditions” during construction phase:-**

- uuu. ‘Consent to Establish’ shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
- vvv. Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD).
- www. Project proponent shall not make any change in the Surface Layout Plan / Civil Plan submitted to the Authority without its prior permission. **In case of any change(s) in the scope of the project and/or otherwise, the project would require a fresh appraisal by the Authority.**
- xxx. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- yyy. The diesel generator sets (D.G. set) to be used during construction / after commissioning should be low-sulphur diesel type and should conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
- zzz. The installation of the Sewage Treatment Plant (STP) if any should be certified by the GSPCB and a report in this regard should be submitted to the Authority before the STP is commissioned.

- aaaa. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.
- bbbb. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- cccc. The solid waste generated should be properly segregated. Dry /inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- dddd. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- eeee. Arrangements shall be made that waste water and storm water do not get mixed.
- ffff. All the top soil excavated during construction activities should be stored if or use in horticulture/landscape development within the project site.
- gggg. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- hhhh. Green-belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest / Agriculture Department.
- iiii. Soil and ground water samples will be tasted to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- jjjj. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.
- kkkk. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the GSPCB.
- llll. The diesel requires for operating DG sets shall be stored in underground tanks and if required, Clearance from concerned authority shall be taken.

- mmmm. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.
- nnnn. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- oooo. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipments etc. as per National Building Code (NBC) including measures from lighting.
- pppp. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- qqqq. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- rrrr. The groundwater level and its quality should be monitored regularly in consultation with ground water authority of the Water Resources Department (WRD), Goa.
- ssss. The installation of the sewage treatment plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the GSPCB before the project is commissioned for operation. Treated effluent released from STP shall be recycled / reused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the sewer line. Treatment of 100% grey water through the centralised treatment should be done. Necessary measures should be adopted to mitigate the odour problem from STP.
- tttt. Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- uuuu. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- vvvv. Energy conservation measures like installation of LEDs' for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use of CFLs / TFLs, if any, should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.



www. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the environment (protection) Act 1986. The height of stack of DG sets should be equal to the height needed for the combine capacity of all proposed DG sets.

xxxx. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

yyyy. Traffic congestions near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.

zzzz. opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.

aaaa. The shades should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

bbbbb. Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.

ccccc. Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.

dddd. Six monthly compliance reports should be submitted to the MOEF with copy to the Goa-SEIAA and GSPCB.

Further, the PP is advised to comply with the following **“General Conditions”** during **post-construction phase:-**

- a. PP shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. The PP to explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line. No physical occupation of allotment will be given unless all above said environmental infra structure is installed and made functional including water requirement prior certification from appropriate authority shall be obtained.

- b. Wet garbage should be treated by organic waste convertor and treated waste (manure) should be utilise in the existing premises foe gardening. And no wet garbage will be disposed outside the premises. Local authority should ensure compliance to this.
- c. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority / GSPCB.
- d. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
- e. Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
- f. A copy of the environmental clearance letter shall be sent by PP to the concerned local body / municipal council / city corporation, as applicable, from whom suggestions / representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP.
- g. The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF&CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO<sub>2</sub> and NO<sub>x</sub> (*ambient levels as well as D.G. stack emissions*) shall be monitored.
- h. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V is to be submitted to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended) and subsequently shall also be put on the company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective Regional Office of the MoEF&CC.
- i. The EC is being issued without prejudice to the action initiated in the Environment (*Protection*) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. **Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.**
- j. In case of submission of false document and non-compliance to any of the stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under the Environment (*Protection*) Act, 1986 (*as amended till date*).

- k. The Goa-SEIAA reserves their right to add any stringent condition or to revoke the environmental clearance, if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reasons.

**In addition,**

1. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within **seven days** of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
2. **Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.**
3. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

*Yours faithfully,*

*Sd/-*

**(Vikas .S.N. Gaunekar)**  
**Director/ex-officio Jt. Secy. Environment**  
**&**  
**Member Secretary, Goa-SEIAA**

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