GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY EIA-Goa State Secretariat,

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No: 3 - 181 - 2010/STE-DIR/07

Date: 15 April 2016

To,

M/s Parsavnath Developers,

PoA through M/s Gera Developments Pvt. Limited, 200, Boat club road, Pune – 411001

Sub: - Environmental Clearance (EC) for proposed construction project of commercial building - 'Imperium V' in the property bearing plot no. 43/44 at EDC Pallo Plaza Panaji, Tiswadi Taluka, North Goa.

Sir,

This has reference to your application dated 26th May 2015 and subsequent resubmission dated 25th June 2015 seeking prior environmental clearance (EC) for the proposed project of commercial building - 'Imperium V' in the property hearing plot no at EDC Patto Plaza, Panaji, Tiswadi Taluka, North Goa as mandated under the provisions of the Environment Impact Assessment (EIA) Notification, 2006 (as amended till date). Accordingly, the above proposal has been screened and appraised under Category 8 (a) - Building and construction projects (as per the Schedule annexed to the said notification) and as category 'B2' project on the basis of the documents enclosed with application. viz. Form-1 and Form-1A. Subsequently, Goa State Expert Appraisal Committee (Goa-SEAC - hereinafter referred as 'Committee') conducted the site-inspection on 14th July 2015 and was followed by project-specific presentation by the NABET/QCIaccredited environmental consultant (M/s Sadekar Enviro Engineers Pvt. Ltd, Panaji, Goa) on behalf of the Project Proponent (PP) during its 49th meeting held on 15th September 2015. However, based on the project specific presentation, the Committee opined that technical matters w.r.t. (a) odour-control measures, (b) energy conservation calculations, (c) water balance and effective provision for rainwater harvesting initiatives, (d) sitespecific soil characteristics and hydro-geological status, (e) disaster mitigation measures vis-à-vis fire-fighting provisions, (f) landscape management and (g) availability of time-



Page 1 of 11

series data pertaining to land use / land cover and CRZ applicability, etc., were not made clear to enable environmental appraisal of the project. As such, the Goa-SEAC sought additional compliance and directed the Project Proponent (PP) to make the observationspecific presentation again. Accordingly, the Goa-SEAC ascertained / verified the compliance during its 51st Goa-SEAC meeting held on 15th October 2015. Subsequently, based on post-presentation discussions and verification of documents submitted by PP during 53rd Goa-SEAC meeting held on 5th November 2015, the aforementioned proposal was recommended to Goa State Environment Impact Assessment Authority (Goa-SEIAA - hereinafter referred as "Authority) for grant of environmental clearance (EC) under the EIA Notification 2006 as amended.

Further, the Committee's recommendations vis-à-vis submission of 'Ecology and Biodiversity report' were deliberated and verified during 28th Authority meeting held on 2nd February 2016 respectively and it was decided to accord prior environmental clearance (EC) as mandated in the EIA Notification, 2006, (as amended).

Accordingly, it has been noted that the aforementioned proposal is seeking prior environmental clearance (EC) as per the provisions of the EIA Notification, 2006; for proposed commercial building - Imperium V in plot no. 43/44 at EDC Patto Plaza, Panaji comprising of 2P + Ground floor + 8 floors, 21 shops, total 325 offices (24 nos. on 1^{st} floor and 301 nos. on 2^{nd} floor to 8^{th} floor) and with 18 food stalls.

Project details and salient features of the proposed developmental activity, as submitted by the PP, is as under -

5,213.10 sq.mts. 1. Total Plot Area

2. Total Built-up area (BUA) proposed 28,532.87 sq.mts. 230 sq.mts.

3. Green belt

2P+ Ground floor+8 floors 4. Number of floors

27.68 mts. 5. Height of building

260 nos. 6. Parking required

-324 nos for 4 wheeler & 215 m^2 for 2 wheeler. 7. Parking proposed



8. Water Requirement -

- a) During Construction phase: 30 m³ / day (will depend on the number of people working and water required for construction activities).
- b) During Operation phase: 75 m³/day

c) Fire fighting:

 120 m^3

- 9. Power Requirements Source : Goa State Electricity Board
 - (a) Construction Phase: 40KVA, Back-up provisions D.G. set (40 KVA X 1 no.)
 - (b) Operation Phase: 1840KVA, Back-up provisions D.G. set (750 KVA X 1 no.)
- 10. Waste Management: Solid waste is proposed to be segregated as biodegradable and non-biodegradable waste. Non-biodegradable waste will be disposed-off through collection facility of the Corporation of City of Panaji (CCP) and Bio-degradable waste is proposed to be treated at in-house organic waste convertor. While, liquid effluent (i.e. Sewage) is proposed to be connected to existing sewage drains for treatment at common sewage treatment plant at EDC, Patto, Panaji.

In view of the above, the State EIA Authority has decided to accord environmental clearance (EC) to the said project under the provision of EIA Notification, 2006; (as amended) subject to compliance to the following "General Conditions" for preconstruction phase:-

- i. Provision may be made for solar water heaters and solar power roof-tops facing towards South as well as south-facing walls to be effectively utilized to optimally harness solar energy. Further, considering the project-specific site, PP may necessarily explore the possibility of energy conservation by hybrid energy sources towards minimizing power requirements through national grid.
- ii. PP shall explain the possibilities to adopt roof-top rainwater harvesting / conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater.
- iii. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and its treatment / air and water pollution / waste-water management.



- iv. 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 site-specific landuse categorization / zoning.
- v. 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.
- vi. This environmental clearance is issued subject to restricting of total built up area 28,532.87 sq.mt. In case of any increase would require re-appraisal by this Authority.
- vii. 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. Judgements / orders issued by Hon'ble High Court, Hon'ble NGT, Hon'ble Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified. PP should submit exactly the same plans appraised by the Goa-SEAC and Goa-SEIAA. If any discrepancy found in the plans submitted or details provided in the above para may be reported to this Authority. This environmental clearance is issued with respect to the environmental consideration and it does not mean that Goa-SEIAA approved the proposed land.
 - viii.PP to ensure no treated water or any waste sewage shall be discharged into any water body.
 - ix. E-waste shall be disposed-off through authorised vendor as per E-waste (Management and Handling) Rules, 2011.
 - x. 'Occupation Certificate' shall be issued to the project by the Corporation of city of Panaji/ NGPDA only after ensuring availability of drinking water and connectivity of the sewer line and/ or operationalization of Sewage Treatment Plant (STP) of appropriate capacity to the project.
 - xi. This environmental clearance is issued subject to obtaining NOC from Forestry & Wildlife division 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 and may be considered separately on merit.



- xii. The height, construction of built-up area of proposed development shall be in accordance with the existing FSI / FAR norms of the urban local body (i.e. NGPDA) and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work. Further, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
 - xiii. All required sanitary and hygienic measures should be in place on-site before starting construction activities and to be maintained throughout the construction phase.

Further, the project proponent is directed to comply with the following "General Conditions" during construction phase:-

- a. '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 before start of any construction work at the site.
- b. The Project Proponent (PP) may use Ready-Mixed Concrete (RMC) to minimize air / water / land pollution and water usage during the construction phase.
- c. Permission to draw groundwater, if feasible, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) prior to construction / operation of the project.
- d. PP 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.
- e. Project proponent shall make suitable provisions for sewage / wastewater disposal and storm water release independently.
- f. The diesel-generator sets (D.G. set) to be used during construction / after commissioning should use low-sulphur diesel and conform to Environment (*Protection*) Rules prescribed for air and noise emission standards as laid down by the GSPCB.
- g. 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. Treated effluent discharged from STP shall be recycled / reused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharged in the common sewer line. Treatment



Page **5** of **11**

of 100% grey-water by de-centralised treatment be prioritized. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water. The possibility of using STP treated water to be used for flushing needs to explored.

- h. Appropriate remedial measures need to be adopted to mitigate the foul odour emanating (due to its malfunctioning / non-operationalization or otherwise) from the STP, if any.
- i. 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.
- J. 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.
- k. The solid waste generated should be properly connected and segregated. Dry / inert solid waste should be disposed-off to the approved sites for land filling after recovering recyclable material.
- I. Disposal of muck during construction phase should not create any adverse effect on the neighbouring entities / communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of the CCP.
- m.To the extent required all the top-soil excavated during construction activities, if any, should be stored separately and to be used in horticulture / landscape development within the project site subsequently.
- n. 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.
- o. Green belt development shall be carried out considering CPCB guidelines including selection of local plant species and in consultation with the State Forest / Agriculture Department.
- p. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants due to proposed developmental activity. It is advisable that ground water level and its quality should be monitored (at least seasonally pre-monsoon / monsoon / post-monsoon) in consultation with the WRD.



- q. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate nearby water courses / mangrove zone in the vicinity, if any and the dump sites for such materials must be secured so that they should not leach into ground water.
- r. Any hazardous waste generated during construction phase should be disposed off as per applicable rules with necessary approval / Authorization from the GSPCB.
- s. The diesel required for operating DG sets shall be stored in underground tanks and if required, NOC from concerned authority shall be taken, as applicable.
- t. Vehicles hired for bringing construction material on the site during non-peak hours should be in good condition and should have pollution under control (PUC) certificate and should conform to applicable air and noise emission standards.
- u. 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 prescribed by the CPCB/ GSPCB.
- v. The approval of competent authority shall be obtained for structural safety of the buildings due to unlikely occurrence of earthquakes, adequacy of fire-fighting equipments, etc. as per National Building Code (NBC) including measures from thunder / lightening.
- w. Fixtures for showers, toilet flushing and drinking should be preferably of low flow either by use of aerators or pressure reducing devices or sensor based control.
- x. Use of glass may be reduced upto 40% so as to reduce electricity consumption and load on air conditioning. If necessary use of high-quality double glass with special reflective coating in windows may be preferred.
- y. Roof may meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material to fulfil requirement.
- z. Energy conservation measures like installation of LEDs lights and tubes 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 and TFLs should be properly installed and disposed-off as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.
- aa. D.G. sets proposed as source of backup power for elevators, common area illumination during operation phase should be with acoustic enclosure and with



- appropriate stack-height conforming to noise standards respectively as prescribed in Environment (*Protection*) Act, 1986.
- bb. 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.
- cc. Traffic congestions near entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public road / place be utilised for parking.
- dd.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.
- ee. The building should have adequate buffer distance between the two separate plots to allow movement of fresh air and passage of natural light, air and ventilation. Regular supervision and other measures for monitoring the same should be in place during the construction phase, so as to avoid disturbance to the surroundings structures. If any.
- ff. 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 the EC.
- gg. Six monthly compliance reports should be submitted to the MOEF & CC, Government of India with copy to the Goa-SEIAA and GSPCB.

Further, the project proponent is advised to comply with the following "General Conditions" during post-construction phase:-

- 1. PP shall ensure completion of MSW disposal facility, green belt development prior to occupation of the buildings. The PP shall explore possibility of utilising excess treated water in the adjacent area for gardening before discharging into sewer line / safe disposal. No physical occupation of allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement. Accordingly, prior certification from appropriate authority shall be obtained.
- 2. Wet garbage should be treated by organic waste convertor and the product-output (*i.e. manure*) should be utilised in the existing premises for gardening. In any case, no wet garbage shall be disposed outside the premises. CCP / local authorities should ensure this compliance strictly.



Page 8 of 11

- 3. CCP / local authorities should ensure that no occupation certification is issued prior to operation of STP/MSW disposal etc. with due consent / authorization from the GSPCB.
- 4. A complete set of all the documents (i.e. proposal along with relevant enclosures plans / maps, etc.,) submitted to Goa-SEIAA should be forwarded to the CCP / local authority and GSPCB.
- 5. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
- 6. Separate funds shall be allocated for implementation of environmental protection measures / EMP along with item wise breaks up. These costs shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year wise expenditure should reported to the GSPCB and this Authority.
- 7. A copy of the clearance letter shall be sent to the CCP / concerned local body ,by the PP if any, from whom suggestions /representation, if any, were received while processing the proposal. The PP shall also ensure that the EC letter shall also be put on the company's website.
- 8. 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 MoEF, the respective Zonal office of the CPCB and the GSPCB. The criteria pollutant levels namely PM₁₀ / PM_{2.5}, SO₂ and NO_X (*ambient levels us well us stuck emissions*) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- 9. The environmental statement for each financial year ending 31st March in Form-V is mandated to be submitted by the PP to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended). Subsequently, it shall also be put on 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.
- 10. 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 and it does not mean that PP has not violated any environmental laws in the past and whatever decision under said Act or of the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case filed against him, if any or action initiated under the said Act.



- 11. In case of submission of false document and non-compliance of stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under Environment (Protection) Act, 1986.
- 12. The Goa-SEIAA and Goa-SEAC reserves their right to add any other stringent condition or to revoke the environmental clearance, if conditions stipulated are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reason.
- 13. PP 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 <u>seven days</u> 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 uploaded on the PP's website.
- 14. Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.
- 15. 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,

(Srinet Kothwale)

Director/ex-officio Jt. Secy. Environment

Member Secretary, Goa-SEIAA

Copy for favour of information to:

- 1. *Dr. Pramod V. Pathak*, Chairman, Goa-SEIAA, Satyam, Pundalik Nagar, Behind Sanjay School, Porvorim 403521.
- 2. *Prof. Antonio Jaime C. Afonso*, Chairman, Goa-SEAC, Bairo Foro, St. Istevam, Tiswadi 403 106.
- 3. P. A. to Principal Secretary (Environment), Secretariat, Porvorim, Goa.

- 4. P. S. to Additional Secretary, Ministry of Environment & Forests (MoEF), &Climate Change (CC), Paryavaran Bhavan, C.G.O. Complex, Lodhi Road, New Delhi 110 510.
- 5. The Member Secretary, Goa State Pollution Control Board (GSPCB), 1st Floor, Dempo Towers, Patto, Panaji, Goa 403 001.
- 6. The Chief Town Planner, Town & Country Planning, Panaji, Goa.
- 7. The Commissioner, Corporation of City of Panaji (CCP), Panaji, Goa.
- 8. The Member Secretary, North Goa Planning & Development Authority, Panaji, Goa.