

**MINUTES OF THE 81<sup>st</sup> GOA STATE ENVIRONMENT IMPACT  
ASSESSMENT AUTHORITY (GOA-SEIAA) MEETING HELD ON 17/06/2022  
AT 03.30 P.M. IN THE CONFERENCE ROOM OF THE 4<sup>th</sup> FLOOR, DEMPO  
TOWER, PATTO, PANAJI-GOA.**

The Eighty first meeting of the Goa - SEIAA (*hereinafter referred as 'Authority'*) was held on 17<sup>th</sup> June 2022 at 03.30 pm in the conference room, 4<sup>th</sup> floor, Dempo Tower, Patto, Panaji. The list of members present during the meeting is annexed (*refer Annexure – 1*).

At the outset, Chairman welcomed Authority members and briefed about the agenda items (*refer Annexure – 2*) to be taken up for discussion / deliberations and suitable decision Accordingly, the same were considered as detailed below.

1. **To discuss on proposed building plan for C.I.S.F. Battalion at Survey No. 230/0, 250/0, 253/1-A, 253/2-A, 254/2-A & 270/1-A, Village – Pernem, Pernem Taluka, Goa for prior EC.**

**Decision:** After discussion and considering recommendation by the Goa-SEAC, the Authority members decided to grant the Environmental Clearance under provision of EIA Notification 2006 (as amended) with following conditions:-

- a) The PP should use only Ready-Mixed Concrete (RMC) to minimize air/ water/ land pollution and water usage during the construction phase.
- b) 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.
- c) 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.
- d) 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.
- e) 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.
- f) 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. The grant of environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to

the project, which has to be dealt separately by the competent authorities in accordance with law.

- g) The height, construction gross built up area of proposed construction is **46163.35 Sq.mts** shall be in accordance with the existing FSI/ FAR norms of the local body and planning authorities 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.
- h) Sewage treatment plant (STP) shall be installed at site. The STP should be certified by an independent expert and adequacy report in this regard should be submitted to GSPCB before the project is commissioned for operation. Necessary majors should be made to mitigate the odour problem from STP.
- i) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- j) '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.
- k) Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) Government of Goa.
- l) 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 proponent need to inform this Authority.**
- m) Project proponent shall make suitable provisions for sewage/ waste water disposal and storm water release independently.
- n) CNG powered generating sets to be used during construction.
- o) The PP need to ensure that no treated water or any waste sewage shall be discharge into any water bodies. The PP shall ensure that the sewage from the labour colony is also treated in the existing sewage treated plant (STP) asper the norms of pollution control board.
- p) 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.
- q) 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.
- r) 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.
- s) 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.

- t) Arrangements shall be made that waste water and storm water do not get mixed.
- u) All the top soil excavated during construction activities should be stored if or use in horticulture/ landscape development within the project site.
- v) 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.
- w) Green-belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest/ Agriculture Department.
- x) 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.
- y) 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.
- z) Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary authorisation of the GSPCB.
- aa) 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.
- bb) 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.
- cc) Sewage treatment plant (STP) contract should be with operation and maintenance after commissioning/ completion of project with minimum period of 5 years.
- dd) The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipment etc. as per National Building Code (NBC) including measures from lighting.
- ee) Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- ff) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- gg) The groundwater level and its quality should be monitored regularly in consultation with ground water authority of the Water Resources Department (WRD), Government of Goa.
- hh) 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.

- ii) Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- jj) Energy conservation measures like installation of only for 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. Used of LED's, 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.
- kk) 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.
- ll) Traffic congestion 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.
- mm) 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.
- nn) The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- oo) 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.
- pp) 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.
- qq) Six monthly compliance reports should be submitted to the MoEF&CC with copy to the Goa-SEIAA and GSPCB.

**2. Further, the Committee decided to direct the PP to comply with the following "General Conditions" during post-construction phase:-**

- a) Biodegradable waste shall be treated in Biogas plant and the Biogas shall be utilised for cooking within the residential complex. Local authority should ensure compliance to this.
- b) 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.
- c) 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.



- d) Consent to Operate shall be obtained from GSPCB before operation, failing which the Environmental Clearance herein shall be deemed to be withdrawn.
  - e) The PP should provide facilities for storage of dry waste, domestic hazardous waste in consultation with the local body and the Goa State Pollution Control Board.
  - f) Noise should be controlled to ensure that it does not exceed the prescribed standards both during day & night time.
  - g) The ground water drawl from existing/proposed bore wells if any should be done only with the prior permission of Ground Water Board. The ground water level and its quality should also be monitored regularly both during construction and operation phase in consultation with Ground Water Board.
  - h) Traffic congestion near the entry and exit points from the roads adjoining the project site must be avoided. Parking should be fully internalized and no public space should be utilized.
  - i) Energy Conservation measures such as solar lighting for common area, solar water heating system, LED's for lighting of areas, LED lights for signage, solar inverters on the etc should be adopted.
  - j) Used LED lights should be properly collected and disposed off/ sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
  - k) A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors etc and submit to the State Expert Appraisal Committee and a copy to GSPCB in three months time.
3. 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.
4. Further this EC is 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.**

## 5. Specific Conditions

- a. The approach road leading to the site should be constructed prior to commencement of any construction activity at site as per the regulations of the Town & Country Planning Department.
- b. PP should take a note that rainwater discharge should be allowed towards the downstream of the nallah.
- c. 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.

- d. 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.
- e. 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.
- f. The Project Proponent shall utilise fly ash bricks in masonry works.
- g. At least 20% of the open spaces as required by the local building bye-laws shall be previous. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as previous surface.
- h. 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.
- i. 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.
- j. 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.
- k. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate re circulation lines for flushing by giving dual plumbing system be done.
- l. 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 will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- m. Areas which are marked as **No Development Zone (NDZ)** should be year marked on site and no construction shall be carried out in the said NDZ. Land Profile of NDZ shall not be altered.
- n. No construction shall be carried out in the property which is identified as private forest, if any.
- o. PP should obtain all the requisite permissions/NOCs/Licenses etc from all the competent authorities before commencement of any activity at site.
- p. **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 including battery storage system. In addition, south-facing walls to be utilized to install solar panels to harness optimum solar energy including Concentric Solar Thermal Technology for cooking, laundry and sterilisation. Use of solar panels may be done to the extent possible like installing solar street lights, PP should install, after checking feasibility, solar-plus-hybrid non-conventional source as source of energy.

- q. 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.
- a. 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 by the competent authorities.
- b. PP should ensure and ascertain that '**civil plans**' which were submitted to the Committee/ Authority during the process of project appraisal be submitted to other line Departments/ agencies concerned while seeking NOC/ Consents/ Permissions, 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.
- c. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority, GSPCB and Planning authority.
- 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. A copy of the environmental clearance letter shall be sent by PP to the concerned Village Panchayat and planning authority as applicable, from which suggestions / representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP within one week time period from date of issue of environmental clearance.
- f. 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.
- g. The PP shall use construction debris for land filling wherever applicable and dispose the C& D waste in compliance to the Construction and Demolition Waste Management Rules.
- h. Borewell water is not to be used for construction phase, only used for drinking purpose and PP should maintain the meter reading on regular basis.
- i. PP should install Bio-gas plant to treat the Bio degradable waste.
- j. Building should be constructed as per National Building Code 2016 part-IV.
- k. PP should do Corporate Social Responsibility and Corporate Environmental

Responsibility as recommended / approved by Goa - SEAC/ Goa SEIAA.

- l. PP should not conduct any construction related activities in the natural reserve demarcated by TCP.
- m. PP should provide chain link fencing to conserve and propagate pristine natural reserve.
- n. No dust / debris from construction activities should be permitted to reach the area under natural reserve.
- o. PP shall make necessary provisions for water required to be met for the proposed project.
- p. The existing temporary structures on site constructed before the grant of Environmental Clearance observed by the Committee during site visit has to be demolished.
- q. No change in scope of work, design of building and layout, buildup area shall be done without prior modification of EC.
- r. Plant local variety of fruit bearing trees like kokum, mango, jamun etc.
- s. Provide facilities for bird nesting.
- t. Discharge of run-off water from the site should be directed first into a settling tank and thereafter into downstream of nalla to prevent siltation in the natural water body.

*The meeting ended with thanks to chair.*



(Smt. Reshma Mathew)  
**Member, Goa-SEIAA**



(Shri. Suhas Godse)  
**Chairman, Goa-SEIAA**



(Dasharath M. Redkar)  
**Member Secretary, Goa-SEIAA**

Place: Patto-Panaji

Date: 17<sup>th</sup> June 2022



### Annexure – 1

Shri. Suhas Godse

Chairman, Goa-SEIAA

Shri. Dasharath M. Redkar

Member Secretary, Goa-SEIAA

Smt. Reshma Mathew

Member, Goa-SEIAA

### Annexure – 2

**AGENDA OF THE 80<sup>th</sup> GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (GOA-SEIAA) MEETING ON 13/06/2022 AT 03.30 P.M. IN THE CONFERENCE ROOM OF THE 4<sup>th</sup> FLOOR, DEMPO TOWER, PATTO, PANAJI-GOA.**

1. To discuss on proposed building plan for C.I.S.F. Battalion at survey no. 230/0, 250/0, 253/1-A, 253/2-A, 254/2-A & 270/1-A, Village – Pernem, Pernem Taluka, Goa for prior EC.
2. Any other matter with permission of the chair.