Minutes of the 9th Goa State Expert Appraisal Committee (Goa-SEAC) meeting held on 11th October 2012 at 10.30 a.m. in the Conference Room of the EIA Secretariat, O/o Goa State Pollution Control Board (GSPCB), Patto.

The ninth meeting of the Goa-SEAC was held on 11^{th} October 2012 in the Conference room of the GSPCB under the Chairmanship of Dr. S. P. Fondekar. The list of members who attended the meeting is at "Annexure – 1".

At the outset, Chairman welcomed the members and subsequently, Dr. Mohan R. Girap, Secretary, SEAC appraised the members about the purpose of the meeting and presented the Agenda items ($\underline{\text{Annexure}} - 2$) to the Members. Accordingly, the item-wise proposals were discussed / deliberated with suitable recommendations, as applicable.

Project-wise comments are listed as under:-.

- 1. Following project proposals which were forwarded by the O/o the Goa Coastal Zone Management Authority (GCZMA) were appraised in order to ascertain the applicability of the EIA Notification, 2006:
 - a. M/s Fairway Barge Operator Pvt. Ltd., Vasco-da-Gama proposed development of barge repair yard in Survey No. 226/2 and 226/1 (Zorint) of Sancoale village in Mormugao taluka.

The Committee decided that as per the 'Schedule' annexed to the EIA Notification, 2006 (as amended up to 4th April 2011), such activity – 'Barge Repair Yard' does not come under the purview of the said EIA Notification, 2006. However, it is required to obtain NOC from the GCZMA as per the CRZ Notification, 2011.

b. M/s Valancani Marine Services, Vasco-da-Gama - proposed development of barge repair yard in Survey No. 319/1 (Rassaim) of Loutolim village in Salcete taluka.

The Committee decided that as per the 'Schedule' annexed to the EIA Notification, 2006 (as amended up to 4th April 2011), such activity – 'Barge Repair Yard' does not come under the purview of the said EIA Notification, 2006. However, it is required to obtain NOC from the GCZMA as per the CRZ Notification, 2011.

c. M/s MOFA Studios Pvt. Ltd., C-30, Lower Ground Floor, Kalkaji, New Delhi – 110 019 – proposed construction of National Institute of Water Sports (NIWS) in Survey No. 7 & 8, P.T. Sheet No. 175, 176 & 184 (total plot area – 65,509 sq. mts. / 52,334 sq.mts.) at Caranzalem.

The Committee was informed that the proposed construction involves total built-up area of 6,789.56 sq. mts. (i.e. less than 20,000 sq. mts.). Accordingly and as per the 'Schedule' annexed to the Environment Impact Assessment (EIA) Notification, 2006 (as amended up to 4th April 2011), the said activity does not come under the purview of said EIA Notification, 2006. However, it is required to obtain NOC from the GCZMA as per the CRZ Notification, 2011.

d. M/s Diana Buildwell Ltd., Vagator Beach, Bardez, Goa - proposed reconstruction of the existing Resort / Hotel in Survey No. 340/1, 353/5, 354/2, 355, 356/7 & 8 of Anjuna village, Bardez taluka.

The Committee was informed that the Project Proponent (PP) had earlier proposed a total built-up area of 22,311.68 sq. mts. and was accordingly appraised as category-B under class 8(a) project as per 'Schedule' annexed to the Environment Impact Assessment (EIA) Notification, 2006. However, the revised proposal, wherein the PP has proposed total built-up area of 19,800 sq. mts., (i.e. being less than 20,000 sq.mts.) does not come under the purview of the said Notification. Accordingly, it was decided that the GCZMA may like to ascertain / verify the same in the context of the total built-up area proposed to be consumed in the re-construction activity. Further, the said activity needs to be complied with the "Policy for utilization of available open plots in CRZ-III zone" issued by the Department of Science, Technology & Environment (DST&E) vide letter no. GCZMA/H, COURT MATTER/07/656/Part IV/311 dated 10th June 2011.

e. M/s Berggruen Hotels Pvt. Ltd., Span Center, 6th Floor, C-556, South Avenue, Santacruz (West), Mumbai – 400 054 - proposed construction of the 'Key Beach Resort' in Survey No. 56/1 and 55/5 of Velsao village, of Mormugao taluka of South Goa district.

The Committee has understood that –

- (i) Entire property is situated partly (13,414 sq.mts. along western side) within 200 mts. from HTL and partly (8,960.50 sq.mts. along eastern side) within a zone between 200 500 mts. from the HTL. Further, it is understood that total plot area is 22,725 sq.mts. and area available for construction is 5,170.85 sq.mts.
- (ii) Such Beach Resort projects falling within the CRZ zone (green-field project) need to obtain NOC from the Ministry of Environment & Forests i.e. NCZMA on recommendation of the State Coastal Zone Management Authority concerned (i.e. GCZMA) as per the CRZ Notification, 2011. Further, the Project Proponent (PP) has to comply with "Policy for utilization of available open plots in CRZ-III zone" issued by the

Department of Science, Technology & Environment (DST&E) vide letter no. GCZMA/H. COURT MATTER/07/656/Part IV/311 dated 10th June 2011.

Further, the Committee decided that the <u>GCZMA</u> should ascertain total built-up area (calculated as per MoEF communication dated 2nd April 2012) proposed to be consumed during the said construction of a beach resort so as to suitably appraise the applicability of the said Notification.

2. Subsequently, M/s Palacio Property Developers Pvt. Ltd., Panaji, Goa who has proposed expansion of a residential project in St. Andre, Goa Velha made a brief power-point (.ppt) presentation through its environmental consultant – M/s Aditya Environmental Services Pvt. Ltd., Mumbai. Accordingly, the Committee noted that the proposal is for expansion and as such, entire project including proposed expansion comprises of 256 flats in Survey Nos. 181/(P), 181/2, 181/3, 181/5(P), 182/7, 183/9, 180/1(P), 180/2(P), and 184/3 of St. Andre – (Near Lobo Garage), Goa Velha village in Tiswadi taluka of North Goa district. The part of the plot is situated along the Zuari tributary and is classified as No Development Zone (NDZ) and falls under CRZ-III category as per the CRZ Notification, 2011.

The project details are as under:

Total plot area – 41,240 sq. mt. Effective plot area – 30,640 sq. mts. Open area required – 4,596 sq. mts. Open space proposed – 4,750 sq. mts.

Approved covered area – 4,427.48 sq. mts.

Proposed covered area – 1,463.40 sq. mts.

Total covered area – 5,980.88 sq. mts. (19.51%)

Permissible FAR – 24,512 sq. mts. Approved FAR – 18,901.70 sq. mts. Proposed FAR – 5,569.20 sq. mts. Consumed FAR – 24,470.90 sq. mts.

Expected total occupancy – 1,152 persons Parking proposed – 332 ECS

Geo-technical soil investigation has been carried out to understand the foundation characteristics through M/s Safe Cores and Tests, Mumbai in June 2006 – by analyzing four (04) bore holes ranging in depth from 24 – 28 mts. Groundwater has been uniformly encountered at a depth of 1.5 mts. Chemical analysis of water indicate that it is aggressive to 'concrete' and corrosive to 'reinforcement steel'.

Water requirement – During Construction phase – 20 m³/day. About 10 kgs./day of sludge will be generated. Wastewater generated 134.78 m³/day to be treated through two STPs' of 70 KLD each.

Solid waste generated - 1-2 MT/day of debris (construction phase) to be utilized for land-filling. While, solid waste generated during operational phase is proposed to be treated through Organic Waste Convertor (OWC).

Power requirement. – Construction phase – 20 HP Diesel generator. Operation phase – 1,600 KW, to be sourced from Goa Electricity Dept. Backup power through two DG sets of 160 KVA capacity each. EMP has been submitted.

Based on the project details submitted vis-a-vis presentation made, the Committee observed that the aforesaid project is an expansion project and sought details / clarifications / submission pertaining to –

- a. The total built-up area proposed to be consumed during the expansion project as per the MoEF communication dated 2nd April 2012.
- b. PP may ascertain total water requirement / total solid waste generation especially during the operational phase (i.e. total occupancy) as well as mode of disposal of sludge generated (i.e. 10 kgs./day) and treatment of waste respectively.
- c. PP may ascertain the feasibility of establishing two STPs' of 70 KLD each. Instead, may like to set-up one 150 KLD STP.
- d. PP may like to submit latest survey plan to be obtained from the Directorate of Settlement & Land Survey (DSLR) indicating / demarcating No Development Zone (NDZ) as per the CRZ Notification, 2011 and not as per the CRZ Notification, 1991.
- e. It is informed that some small existing structures within the plot area have been demolished. As such, PP may clarify and submit their then-existing site-specific location vis-a-vis CRZ status, as applicable.
- f. PP may furnish details pertaining to Rain-Water Harvesting (RWH) initiatives proposed to be adapted for optimum water storage / groundwater recharge, as applicable.

Subsequently, Committee conducted on-site inspection on 19th October 2012 to ascertain the existing land-use / land-cover classification and/or applicability of RP-2021. Accordingly, the <u>Project Proponent (PP) has been requested to submit CRZ visa-vis RP-2021 applicability as well as compliance to (a) to (f) above, prior to initiate any further action / recommendations, if any, in the matter.</u>

3. Later, following proposals for carrying out extraction of minor minerals (new / renewal of lease), as per the Hon'ble Supreme Court "Order" issued dated 27th

February 2012 in a matter S. L. P. (c) No. 19628 – 19628 of 2009 and in response to 'Official Memorandum' issued by the Ministry of Environment & Forests (MoEF), Govt. of India, as well as 'Order' issued by the Directorate of Mines and Geology, Govt. of Goa. were taken up for discussion / deliberation subsequent to project presentation by respective Project Proponent (PP) / environmental consultant. Project details may please be referred from *Annexure-2*.

- a. Issuance of prior EC to enable renewal of mine leases of Saopedro stone mine located in Survey Nos. 11/1, 2 & 6 at St. Pedro in Panelim village in Tiswadi taluka of North Goa district by
 - (i) **M/s Sheilaja V. Tamba** (lease deed no. 3/Basalt/Murum/Laterite boulders/2005 1.20 ha. and (lease deed no. 5/BA/MU/1991 2.98 ha.):
 - (ii) M/s Vasudeva Tamba (lease deed no. 4/Basalt/2007 1.62 ha.)
- b. Issuance of prior EC in case of a New mine lease for Laterite quarry located in Survey No. 29/4 (8,000 sq.mts.) in Cacora village of Quepem taluka of South Goa district proposed by **Mr. Shirish Kamat**.

Considering the site-specific importance vis-a-vis difference in techniques / method of extraction proposed to be utilized in case of road metal and Laterite stones, the <u>Committee</u> conducted site-inspection of (a) on 19th October 2012 and of (b) on 31st October 2012 and accordingly, <u>has recommended for grant of prior EC as mandated in the EIA Notification, 2006</u>. Further, the Project Proponent (PP) is required to –

- a. Comply with the 'Goa Mineral Concession (Amendment) Rules, 2012 notified by the Directorate of Mines and Geology (DMG) and published in Official Gazette Series-I, No. 24 dated 17th September 2012.
- b. Submission of approved quarrying plan by the competent officer as per Sub-rule (7) as well as specific compliance to Sub-rules 7(A) to 7(D) of the above-referred Rules, as applicable, if any.
- 4. This was followed by a discussion / deliberations on the proposal submitted by M/s Adventz Group of Companies M/s Zuari Holdings Ltd., Zuarinagar, Goa 403 726 wherein the environmental consultant M/s BMT Consultants (India) Pvt. Ltd., Ahmedabad has prepared draft Terms of References (ToRs') for proposed construction of Captive Jetty in Survey No. 13 along Colva Bay in Chicolna village of Mormugao taluka of South Goa district.

The Committee noted that the cargo handling capacity is 2.81 MTPA (i.e. less than 5 MTPA) and accordingly, the proposed activity is classified as category 'B' project under class 7(e) as per Schedule annexed to EIA Notification, 2006. Project Proponent (PP) has also examined practical feasibility of establishing the captive jetty at other two sites namely, (a) Zuari estuary – uneconomic capital and extensive maintenance dredging, densely-populated area and (b) Cola bay – shallow water depths, affect the tourism potentiality and were found unsuitable.

The setting of captive jetty at the proposed site involves construction of –

- 1. Berth (02 nos.) $-220 \text{ m} \log X 25 \text{ mt.}$ wide
- 2. Approach trestle 605 mt. long X 9 mt. wide
- 3. Breakwater 1,800 mt.
- 4. Dredging
- 5. Pipelines two sets of 3,000 mt. long each
- 6. Conveyor one set of 3,000 mt. long

Further, salient features of the said development include -

- 1. Raw materials proposed to be handled include liquid ammonia (60,000 tpa), phosphoric acid (5,80,000 tpa), muriate of potash (2,40,000 tpa), urea (10,000 tpa), NP/NPK fertilizers (5,00,000 tpa) and white oil (4,30,000 tpa) imported through MPT berth nos. 8, 10 and 11.
- 2. These raw materials are transported to the plant (Zuari Holdings Ltd., ZHL) by trucks / tankers through a road network passing through populated areas.
- 3. The cumulative annual production of fertilizers in year 2010-11 was 0.8 MTPA.
- 4. EC for debottlenecking and revamping activities upto 1.5 MTPA has been accorded by the MoEF in September 2009. EIA was undertaken by the NEERI, Nagpur.
- 5. As such, the proposed construction of a captive jetty would
 - (a) Reduce raw material logistics costs
 - (b)Minimize traffic congestion
 - (c) Avoid transportation through populated areas / risk minimization.
 - (d)Enable discontinuance of import of raw materials through MPT berths.
 - handle / import about 28,10,000 TPA (i.e. 2.8 MTPA) of sea-borne traffic comprising of (i) liquid ammonia, (ii) phosphoric acid, (iii) muriate of potash, (iv) urea, (v) NP/NPK fertilizers and (vi) white oil.
- 6. The proposed site / activity, being within CRZ-III zone, come under the purview of the CRZ Notification, 2011 and would require NOC from the Goa Coastal Zone Management Authority (GCZMA).

Thus, based on the above details / submission by the PP, the Committee decided to include the following additional ToRs' to be forwarded to the proponent to enable them to conduct rapid EIA:-

- 1. Proposed EIA study should address / ascertain the probable cumulative effect likely to be impacted due to other proposed developmental projects within the vicinity of the said coastal / bay stretch. Accordingly, it is required to carry out bathymetric survey so as to understand the bottom topography vis-à-vis pattern of sediment movement / hydrodynamics in the bay region.
- 2. It is advisable to ascertain maximum depth for the proposed capital dredging (i.e. 44,000 m³) as well as utilization of the dredged material considering its benthic population.
- 3. EIA report should necessarily address
 - 1. Modus operandi to treat and/or dispose-off ballast water so as not to disturb the local ecological / ambient aquatic set-up.
 - 2. Remedial measures to be adopted on-site / off-site in case of accidental release / pipeline rupture / improper handling, etc., if any.
 - 3. Strength, Weakness, Opportunity and Threats (SWOT) analysis for the proposed transportation routes so as to ascertain its practical feasibility visà-vis socio-economic constraints.
- 4. The study should also address probable coastal erosional measures to minimize river-bank instability / off-shore sand bar formation, etc.,

The meeting ended with vote of thanks to the Chair.

Mr. S. M. Sawant		
Mr. Antonio James Afonso		
Mrs. A. A. B. Barreto	 	
Dr. Purnanand P. Savoikar	 	
Dr. Savita S. Kerkar	 	

Dr. Mohan R. Girap Secretary, Goa-SEAC

Dr. S. P. Fondekar Chairman, Goa-SEAC

Place: Patto, Panaji

Date: 1st November 2012

ANNEXURE – 1

List of members who attended the ninth Goa-SEAC meeting

1.	Dr. S. P. Fondekar, Margao	_	Chairman
2.	Mrs. A. A. B. Barreto, Panaji.	-	Member
3.	Mr. S. M. Sawant, Porvorim	-	Member
4.	Dr. Purnanand Savoikar, Head Civil Eng., GP, Mayem	-	Member
5.	Mrs. Savita S. Kerkar, Professor, DBT, Goa University	-	Member
6.	Mr. James Afonso, St. Istevam	-	Member
7.	Dr. Mohan R. Girap, Panaji	-	Secretary