

**Minutes of the 6th Goa State Expert Appraisal Committee (Goa-SEAC)
meeting held on 7th December 2011 at 2.30 p.m. in the Conference Room of the
Goa State Pollution Control Board (GSPCB), Patto, Panaji.**

The sixth meeting of the Goa-SEAC was held on 7th December 2011 in the Conference room of the GSPCB under the Chairmanship of Dr. S. P. Fondekar, Chairman, Goa-SEAC. The list of members is annexed at “Annexure – 1”.

At the outset, Chairman (Goa-SEAC) welcomed the members and informed about the submission of his resignation from the post of Chairman (Goa-SEIAA), as he has been nominated as one of the “**Members on the Panel of Experts**” for NABET accreditation constituted by the Ministry of Environment & Forests (MoEF), Govt. of India, New Delhi. However, he requested to proceed with the scheduled meeting and consider this presence as an ‘Observer’ instead of Chairman (Goa-SEAC). Further, he opined to nominate any existing SEAC member, preferably a senior-most, to replace and function as Chairman (Goa-SEIAA) which, if agreed to, may be forwarded for consideration / approval of the State Government for onward submission to the MoEF to effectuate necessary amendment / corrigendum in the ‘Order’ notified earlier in Aril 2010. Accordingly, he opined that Dr. Purnanad Savoikar be entrusted with the said post of Chairman (Goa-SEAC) as Mrs. Anita Baretto and Mr. S. M. Sawant conveyed their inability and declined to accept the post.

All the Goa-SEAC members congratulated Dr. S. P. Fondekar on his new assignment and responsibilities reposed in him at a National-level and wished success in the field of Quality Control and Auditing (QCA). SEAC members agreed to the proposal and informed that the same will be forwarded to the Goa-SEIAA for further needful as per the mandate of the EIA Notification, 2006. Subsequently, Dr. Mohan R. Girap, Secretary (Goa-SEAC) appraised the members about the purpose of the meeting and presented the Agenda items (Annexure – 2) to the Members.

Subsequently, based on the project details submitted in the prescribed format, project presentation, compliance to site-specific observations by the following PPs’, namely –

1. **M/s Four Seasons Shelter** for its proposed residential project at Bainguinim village in Tiswadi taluka.
2. **M/s Prithvi Consultants Pvt. Ltd., Panaji** for the proposed residential project at Bainguinim.
3. **M/s Nanu Estates Pvt. Ltd., Margao** for the proposed residential-cum-commercial project at Aquem, Margao.

4. **M/s Commonwealth Developers Pvt. Ltd., Margao** for the proposed residential-cum-commercial project at Gogol, Margao.

In addition, **M/s Berger Paints India Ltd., Kundaim** made a presentation on its proposal of on-site expansion in production capacity of paint products / ranges.

And after due deliberations and discussions of every proposal, the Committee made the following observations / recommendations. In addition, the Committee felt that the Project Proponent (PP) should invariably comply to 'Common Recommendations' (10 in nos.)' proposed by the SEAC during its First meeting held on 5th January 2011 so as to maintain the uniformity in project monitoring, reporting and management.

Project-wise comments are listed as under:-

- A. M/s Four Seasons Shelter, Pune** – The PP has proposed to construct a residential building in Survey no. 20/1 (part), Sub. Div. No. 1(P) in Bainguinim village in Tiswadi taluka of North Goa district.

Project details are as under:-

Total plot area – 17,565.00 sq. mt.

Internal Road Layout for traffic management has been designed.

Total Built-up area – 20,914.87 sq.mt.

Total covered area – 4200.14 sq. km.

Net Floor area – 14,012 sq. km.

Open space required – 2634.75 sq. km.

Open space provided – 2646.00 sq. km.

Quantity of substratum will be used for creation/refilling of basement.

Geo-technical investigations have been carried out.

Parking facility provided for 210 vehicles.

Water requirement –

(a) Construction phase – 50 cmd to be sourced from bore well (domestic – 10 and construction – 40)

(b) Operation phase – 182 cmd to be sourced from PWD (83 cmd) as well as treated STP water 99 cmd).

Waste water treatment – 111 cmd of sewage will be generated. 125 CMD capacity STP is proposed with MBBR technology. Recycled water (105 cmd) is intended to be used for gardening, flushing as well as car/road washings. Balance water (i.e. 6 cmd) will be sent to public sewer.

Power requirement –

(a) Construction phase – 20 HP

(b) Operation phase – 1126 KW sourced through Goa State Electricity Board
Energy efficient electrical and HVAC installations for energy conservation.

Back-up power through 500 KVA D. G. set with 65% load factor

Solid waste generated: During construction – 1 – 2 MT per day. While, debris generated will be used for foundation and basement.

During operation phase total waste – 0.4 TPD (biodegradable – 0.2 TPD and Non-biodegradable – 0.2 TPD). Biodegradable waste will be treated in mechanical composting units (i.e. installation of OWC having suitable treatment capacity) within the complex. Non-biodegradable waste is expected to be disposed-off at suitable disposal site.

Environment Management Plan (EMP) has been prepared.

The Committee observed that –

1. The developmental work, as proposed, has not yet been initiated on-site except the erection of temporary fencing along the common border with the adjoining property which is proposed to be developed by M/s Prithvi Consultants.
2. The PP has been advised to adopt Water Harvesting initiatives in the form of storage tanks rather than to recharge the groundwater. PP may like to recharge the existing bore-well by directing the storm drain water through properly devised filter mechanism.
3. The PP should sustainably utilize the STP-treated water instead of releasing it through public sewer. Alternatively, the treated water may be supplied to nearby village community for gardening, landscaping, and construction purposes.

Comment – The aforesaid proposal may be considered to accord prior Environmental Clearance (EC) as mandated under the EIA Notification, 2006.

B. M/s Prithvi Consultants Pvt Ltd., Panaji - The PP has proposed to construct a residential building in Survey no. 20/1 (part), Sub. Div. No. 1(P) in Bainguinim village of Tiswadi taluka in North Goa district.

Project details are as under -

Total plot area – 20,914.87 sq. mt.

FAR Permissible – 22,500 sq.mt. (0.8%)

FAR Proposed / consumed – 21,211.74 sq.mt. (0.799%)

Total Built-up area – 32,185.85 sq.mt.

Internal Road Layout for traffic management has been designed.

Total covered area – 11,341.99 sq. km.

Open space (a) Required – 5655 sq. km.

(b) Proposed – 6000 sq. km.

Geo-technical investigations have been carried out.

Parking facility –218 vehicles.

Rainwater harvesting is proposed primarily to recharge groundwater.

Water requirement –

- (a) Construction phase – 50 cmd (40 cmd for construction and 10 cmd for domestic use) – to be sourced from PWD.
- (b) Operation phase – 187 cmd (fresh water – 103 cmd and 84 cmd as recycled STP water)

Waste water treatment – 136 cmd of total sewage is expected to be generated which would generate about 129 cmd of treated water. Out of this, about 84 cmd water is to be used for flushing and gardening while, 45 cmd is to be released into the public sewer. As such, Dual Plumbing System is proposed. 10 kg per day of sludge is expected to be generated due to STP treatment.

Power requirement –

- (a) During construction phase – 50 KW
- (b) During operation phase – 5 MW – to be sourced from Goa State Electricity Board

D.G. sets as back-up power supply is proposed – 40% Residential and 100% for commercial usage.

Solid waste generated –

- (a) Construction phase – 1-2 MT per day
- (b) Operation phase – 0.5 TPD with equal volume of biodegradable and non-biodegradable. Biodegradable waste to be treated with OWC of appropriate capacity.

Environment Management Plan (EMP) has been prepared.

The Committee observed that –

1. The developmental work, as proposed, has not yet been initiated on-site except the erection of temporary fencing along the common border with the adjoining property which is proposed to be developed by M/s Four Seasons Shelter.
2. The PP has been advised to adopt Water Harvesting initiatives in the form of storage tanks rather than to recharge the groundwater.
3. The PP should sustainably utilize the STP-treated water instead of releasing it through public sewer. Alternatively, the treated water may be supplied to nearby village community for gardening, landscaping, and construction purposes.

Comment – The aforesaid proposal may be considered to accord prior Environmental Clearance (EC) as mandated under the EIA Notification, 2006.

C. M/s Nanu Estates Pvt. Ltd., Margao – The PP has proposed to construct a residential-cum-commercial building (i.e. 12 residential building (basement+stilt+8 floors) – 2/3 BHK + commercial block – basement+ground level+3 floors) in Chalta no. 27 of P.T. sheet no. 245 and

Chalta no. 100 of P.T. sheet no. 225 of Aquem village near Margao city in Salcete taluka of South Goa district.

Project details are as under -

Total plot area – 14,484 sq. mt. (3 Acres, 22.8 Guntas)
Total Built-up area – 49,087.80 sq.mt.
Total ground coverage allowed – 4,819.20 sq. mt. (40%)
proposed – 4,557.98 sq. mt. (38%)

Total FAR – allowed – 28,968 sq. mts. (200%)
Proposed – 28,362.49 sq. mt. (196.2%)
Total estimated cost – 35 crores
Green belt / landscape area – 3,948 sq. mts. (32.76 %)
Total dwelling population – 1512 + 82 nos. as floating population

Quantity of substratum / earth material proposed to be excavated is about 12,536 m³. Out of this, about 2,758 m³ will be used backfilling on the back side of the retaining walls, under-ground sumps. While, 2,717 m³ of top soil is to be reused for landscaping. 7,061 m³ is to be utilized for filling up of low-lying area. Further, 49.14 m³ is construction debris.

Geo-technical soil investigations have been carried out.

Parking facility provided for 439 ECS.

Water requirement

- (a) Construction phase – 45 KLD to be sourced through PWD tankers
- (b) Operation phase – 218.22 KLD to be sourced from PWD.

Wastewater treatment – Total sewage / wastewater generated is expected to be 157.12 KLD (total – 196.4 KLD & diversity factor of 80%) . About 8 kgs. of sludge per day will be generated and will be used as manure for landscaping. 160 KLD capacity STP is proposed. Recycled water is intended to be used for landscaping (15 KLD), flushing (70.09 KLD), car washing & road cleaning (40 KLD) and excess water (24.17 KLD) to be discharged to existing sewer line.

Power requirement –

- (a) Construction phase – 30 KW & 1,200 KVA to be sourced, temporarily, from Goa Electricity Department (GED) by installing 02 nos. of 750 KVA transformers.
- (b) Operation phase – 1200 KVA to be sourced through GED. In addition, Back-up power is proposed to be sourced from one D. G. sets of 125 KVA.

Solid waste generated: (a) During construction – 20.4 kgs. per day and proposed to be disposed to Municipal Authority.

(b) During operation phase total waste – 700.9 kgs. per day

which is proposed to be segregated into organic and inorganic waste Organic waste to be treated by vermicomposting and inorganic waste to be disposed off through authorized recycler.

Environment Management Plan (EMP) has been prepared.

The Committee observed that –

1. The developmental work has not yet been initiated on site.
2. As the area is low-lying, the PP has been advised to sustainably adopt appropriate Rainwater Water Harvesting initiatives subject to its site-specific feasibility. Care should be taken not to inundate the adjoining area, especially during the monsoon season, due to the proposed developmental activity.
3. The PP intends to utilize the existing municipal sewer line. In addition, it should sustainably utilize the STP-treated water instead of releasing it through public sewer. Alternatively, the treated water may be supplied to nearby user community / municipality for gardening, landscaping, and small-scale construction purposes.

Comment – The aforesaid proposal may be considered to accord prior Environmental Clearance (EC) as mandated under the EIA Notification, 2006.

D. M/s Commonwealth Developers Pvt. Ltd., Margao – The PP has proposed to construct a residential-cum-commercial building “CD – Signature” (i.e. Block A, B, C & D / 2-3-4 BHK

including shops) in Chalta no. 3 (Sub. Div. 1 & 2) / P.T. Sheet no. 118 and Chalta no. 4(P), 5(P) & 18(P) / P.T. sheet no. 119 in village Gogol near Margao city in Salcete taluka of South Goa district.

Project details are as under –

Total plot area – 10,004 sq. mt. (2 Acres – 18.8 Guntas)
Total Built-up area – 36,013 sq.mt.
Total ground coverage allowed – 3,777.60 sq. mt. (40%)
proposed – 3,773.10 sq. mt. (37.71%)

Total FAR – allowed – 20,008 sq. mts. (200%)
proposed – 20,006.87 sq. mt. (199.99%)

Total estimated cost – 50.3 crores
Green belt area – 3,315 sq. mt.

Quantity of substratum / earth material proposed to be excavated is about 22,969 m³. Out of this, about 4,569 m³ will be used backfilling on the back side of the retaining walls,

under-ground sumps. While, 1,326 m³ of top soil is to be reused for landscaping. 17,074 m³ to be dumped on other client's site. Further, 36.01m³ is construction debris.

Geo-technical soil investigations have been carried out.

Parking facility provided for 291 ECS.

Water requirement

- (a) Construction phase – 45 KLD to be sourced from PWD
- (b) Operation phase – 161.54 KLD to be sourced from PWD.

Waste water treatment – Total sewage generated is expected to be 136.39 m³ per day. About 6.8 kgs. of sludge per day will be generated and will be used as manure for landscaping. 136 KLD capacity STP is proposed. Recycled water is intended to be used for landscaping (10 KLD), flushing (62.971 KLD) and excess water (63.419) to be discharged to existing sewer line.

Power requirement –

- (a) Construction phase – 100 KVA to be sourced, temporarily, from Goa Electricity Department (GED). Also 63 KVA D.G. set is proposed as stand-by mode power supply.
- (b) Operation phase – 1950 KVA to be sourced through GED. In addition, Back-up power is proposed to be sourced from 2 nos. of D. G. sets of 200 KVA each.

Solid waste generated: (a) During construction – 30 kgs. per day to be treated through vermicomposting.

(b) During operation phase total waste – 567.5 kgs. per day which is proposed to be segregated into organic (340.5 kgs.) and inorganic waste (227 kgs.). Organic waste to be treated by vermicomposting and inorganic waste to be disposed off through authorized recycler.

Environment Management Plan (EMP) has been prepared.

The Committee observed that –

1. The developmental work has not yet been initiated on site.
2. As the area is low-lying, the PP has been advised to sustainably adopt appropriate Rainwater Water Harvesting initiatives subject to its site-specific feasibility. Efforts should be made towards optimally recharge the groundwater.
3. The PP intends to utilize the existing municipal sewer line. In addition, it should sustainably utilize the STP-treated water instead of releasing it through public sewer. Alternatively, the treated water may be supplied to nearby user community / municipality for gardening, landscaping, and small-scale construction purposes.

Comment – The aforesaid proposal may be considered to accord prior Environmental Clearance (EC) as mandated under the EIA Notification, 2006.

E. M/s Berger Paints (India) Ltd., Kundaim – the firm proposed to expand its production capacity by adopting / change over to alternate high efficient industrial methodology / instrumentation to manufacture paint products / ranges. The Committee considered the proposal favourably and decided to conduct site-inspection to ascertain the proposed methodology.

The meeting ended with vote of thanks to the Chair.

Mr. S. M. Sawant

_____ *Sd.-* _____

Mrs. A. A. B. Baretto

_____ *Sd.-* _____

Dr. Purnanand Savoikar

_____ *Sd.-* _____

Mr. Antonio Jaime Afonso

_____ *Sd.-* _____

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

Sd.-
Dr. S. P. Fondekar
Chairman, Goa-SEAC
(has forwarded his resignation and is being processed)

Place: Saligao, Panaji.

ANNEXURE – 1

List of members who attended the sixth Goa-SEAC meeting

1. Dr. S. P. Fondekar, Ex-Dy. Director, NIO, D'paula. – **Chairman**
2. Mr. S. M. Sawant - *Member*
3. Prof. Antonio Jaime C. Afonso, St. Istevam. - *Member*
4. Mrs. A. A. B. Baretto, Ex-Head, Dept. of Food Technology, Govt. Polytechnic, Panaji.
- *Member*
5. Dr. Purnanand Savoikar - *Member*
6. Dr. Mohan R. Girap, Proj. Sci. (Geology), GSCST - *Secretary*

ANNEXURE - 2

Agenda Items to be discussed during the 6th Goa-SEAC meeting on 7th December 2011

- a. Presentation of the proposal by **M/s Four Seasons Shelter** for its project at Bainguinim village in Tiswadi taluka as well as compliance to observations made by Members during site-inspection conducted on 25th November 2011.
- b. Presentation of the proposal by **M/s Prithvi Consultants Pvt. Ltd., Panaji** for the proposed project at Bainguinim as well as compliance to the observations made by Members during site inspection conducted on 25th November 2011.
- c. Presentation of the proposal by **M/s Nanu Estates Pvt. Ltd., Margao** for the proposed residential-cum-commercial project at Aquem, Margao as well as compliance to observations made by Members during site-inspection conducted on 25th November 2011.
- d. Presentation of the proposal by **M/s Commonwealth Developers Pvt. Ltd., Margao** for the proposed residential-cum-commercial project at Gogol, Margao as well as compliance to observations made by Members during site-inspection conducted on 25th November 2011.
- e. Presentation of the proposal by **M/s Berger Paints India Ltd., Kundaim** for the proposed on-site expansion in production capacity of paint products / ranges.
- f. Any other matter as per the approval of the Chairman, Goa-SEAC.
