

**MINUTES OF THE 44TH GOA STATE ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY (GOA-SEIAA) MEETING HELD ON 16TH
JULY 2018 AT 03.00 P.M. IN THE CONFERENCE ROOM OF THE
GOA STATE POLLUTION CONTROL BOARD.**

The Forty Fourth meeting of the Goa-SEIAA (*hereinafter referred as 'Authority'*) was held on 16th July 2018 at 03.00 p.m. in the conference room of GSPCB, 1st floor, Dempo Tower, Patto, Panaji. The list of members present during the meeting is at *Annexure – 1*.

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

- 1. M/s Sapna Ceramics Pvt. Ltd.,** proposed environmental clearance (EC) for capacity enhancement (i.e. from 1,250 tons per day to 2,500 tons per day) after amalgamation of three lease and one new lease . (on perusal of the said application, it was noted that prior EC was granted during March 2013 to three minor mineral leases under Renewal ó 10/basalt/93 (10,000 m²), 03/basalt/94 (29,225 m²) & 02/basalt/98 (22,000 m²) belonging to M/s Sapna Ceramics and one New lease ó 01/basalt/15 (50,000 m²) belonging to M/s Nanu Industries with total production capacity of 1,250 tons per day.

The said matter was deliberated by Goa-SEIAA in its 41st authority meeting held on 5th February 2018 wherein the Authority after detailed discussion and deliberation decided to refer the matter back to Goa-SEAC. Further Goa-SEAC should put up a detailed report as to what is the amount of material extracted from the date of grant of leases till 31-12-2017 and the environmental damage caused due to the said extraction. Accordingly Goa-SEAC had communicated to Directorate of Mines & Geology regarding detailed report as to what is the amount of material extracted from the date of grant of leases till 31-12-2017 and the environmental damage caused due to the said extraction. Subsequently Directorate of Mines & Geology (DMG) Panaji have submitted the reply stating that as per their record the submission made by PP is found to be correct regarding the same. Committee during its 93rd SEAC meeting held on 10th May 2018 perused and examined the said communication and decided to communicate the same to the Goa-SEIAA this fact for further necessary decision in the matter.

Decision: The Authority perused the report from the Directorate of Mines & Geology (DMG) on the material extracted from the date of grant of leases till 31-12-2017 .However the

Authority noted that there is no report on environmental damage caused by the said mining. Accordingly the Authority after detailed decision and deliberation decided to communicate to Goa-SEAC to submit environmental damage report caused due to the said extraction before taking further decision in the matter.

2.5“MANGLAM CASA AMORA” Proposed Group Housing and Commercial Project at Survey No. 20/3-A, Village Bainguinim, Taluka Tiswadi, Goa of **M/s. Manglam Build Developers Ltd.** All issues related to environment including air, land, soil, ecology and biodiversity and social aspects were discussed. Committee noted that the project is under **8a (B2) category of EIA Notification 2006 (building & constructions)**. Further documents like Consolidated statements, Form I and IA. Brief extract of the project details submitted by Project Proponent is as below:

1	Name of the project Proponent	Applicant Company - Manglam Build Developer Ltd. Authorised Signatory - Mr. Sanjay Gupta
2	Address for Communication	Mr. Sanjay Gupta Manglam Build Developer Ltd. Behind Hotel Fern Kadamba Old Goa bypass Highway, Kadamba Bainguinim village, Old Goa 403402 Mo no 9011098657 Email- skg.casaamora@gmail.com
3	Name & location of the project	Revised Proposal of Proposed Group Housing and Commercial Project “ MANGLAM CASA AMORA ” At Survey No. 20/3-A, Village Bainguinim, Taluka Tiswadi, North Goa, Goa
4	Plot Area	32893 Sq.m (8.13 Acres)
5	Net plot Area	29,889 Sq.m (7.39 Acres)
6	FSI Area Non-FSI Area Total construction Area Building configuration & Height of the building	FSI Area =Permissible: 26314.40 sq.m., Proposed: 22946.46 sq.m. Non-FSI Area = 15932.84 sq.m. Total construction Area/Built-up area = 38879.30 sq.m. Building configuration Residential and Commercial = Resi. 2 BHK ó 288, 1.5 BHK ó 76, Shops ó 8, Club house ó 1 with swimming pool. Height of the building : 14.35 meters including stilt height
7	No. of shops	8 Nos.
8	Total water requirement (Construction/operation phase)	Total water requirement operation phase = 303 KLD (Fresh Water 172 KLD + Treated Water 131 KLD) Construction Water Phase = 30 - 40 KLD
9	Sewage generation	218 KLD
10	STP Capacity / Proposed Technology	STP Capacity = 190 KL (We are proposing 190 KL capacity STP, due to less occupancy scenario in Goa) Proposed Technology = SMMBR

11	Total Solid Waste Quantities	867 kg/day
13	Energy Efficiency	Total savings in percentage 35.70 %
14	Parking 4 W and 2W	385 (4 W) AND 200 (2-W)
15	Power requirement	Total Power Requirement: 2714 KW, Source: Goa Electricity Board (GEB)
16	D.G set Capacity	Total 2 Nos. of DG Sets, having total capacity 325 KVA (1X200 KVA + 1 X 125 KVA)
17	RWH tank capacity	220 m3/hr
18	EMP cost (including DMP cost)	During Construction: Capital cost: 35.00 Lac & Recurring Cost: 12.50 Lac During Operation Phase: Capital cost: 101.00 Lac & Recurring Cost: 21.50 Lac
19	No. of trees on site	In Phase-III-24 Trees In Preservation area-20 Trees

During 94th Goa-SEAC meeting held on 14th June 2018 the said proposal is recommended to Goa-SEIAA for grant of EC.

Decision: Authority after detailed discussion and deliberation and considering the recommendation from the Goa-SEAC decided to conduct site inspection of the proposed project.

3. **M/s Naik navare "Esmeralda"** at survey No. 14/1-B, 15/1-B at Panelim, Goa. for proposed construction of residential & commercial project "**Esmeralda**" at survey No. 14/1-B, 15/1-B at Panelim, Goa. All issues related to environment including air, land, soil, ecology and biodiversity and social aspects were discussed. Committee noted that the project is under **8a (B2) category of EIA Notification 2006 (building & constructions)**. Further documents like Consolidated statements, Form I and IA. Brief extract of the project details submitted by Project Proponent is as below:

	Description	Details
1	Name & location of the project	Esmeralda Residential & Commercial Project at S. No. 14/1-B, 15/1-B at Village Panelim, Taluka of Tiswadi, State-Goa
2	Plot Area	49,856.00 m ²
	Net plot Area	39,192.00 m ²
4	FSI Area	26,414.40 m ² .
	Non-FSI Area	25,020.60 m ² .
	Total construction Area	51,435.00 m ²
	Building configuration & Height of the	

building				
Sr. No.	Name of Bldg.	No. of Floors	No. of tenements / shops	Height above parking up to eaves (m)
Buildings completed as per EC received				
1	Bldg. L	P+4	16	11.5 above parking
2	Bldg. M	P+4	16	11.5 above parking
3	Bldg. N	P+4	16	11.5 above parking
4	Bldg. P	P+4	16	11.5 above parking
5	Bldg. Q	P+4	04	11.5 above parking
Under Construction				
6	A Bldg.	P+4	11	11.5 above parking
7	B Bldg.	P+4	08	11.5 above parking
8	C Bldg. With club house & swimming pool	G +3	08	11.5
9	D Bldg.	P+4	11	11.5 above parking
10	E Bldg.	P+4	08	11.5 above parking
11	F Bldg.	G +3/P+4	12	11.5
12	G Bldg.	P+4	11	11.5 above parking
13	H Bldg.	P+4	08	11.5 above parking
14	I Bldg.	G+3/ P+4	12	11.5 above parking
15	J Bldg.	P+4	11	11.5 above parking
16	K Bldg.	G +3/P+4	12	11.5 above parking
17	Open bungalow Plots	G+1	23	7.5
18	Farmhouse Plot	G + 1	01	7.5
19	Commercial Bldg	B+G+2	(stores, shops, offices)	11.5
		Total	204 + stores, shops, offices	
5	No. of shops		4	
6	Total water requirement(Construction/operation phase)		During Construction Phase:- 10-20 KLD (depend on construction activity), During Operation Phase :- 98.68 KLD	
7	Sewage generation		134.12 Cum/day	
8	STP Capacity		135 Cum	
9	Total Solid Waste Quantities		Biodegradable :- 304 Kg/Day, Non- Biodegradable :- 202 Kg/Day	
10	RG Area		11,529.05 m ²	
11	No. of trees		613 Nos.	
12	Energy Efficiency		Total energy saving will be 3.64 %	
13	Parking 4 W and 2W		4 W ó 230 Nos. & 2 W- 89 Nos.	
14	Power requirement		Connected Load : 1747.63 KW Maximum Demand: 1100 kVA	
15	D.G set Capacity		1 X 125 KVA	
16	RWH tank capacity		55 Cum and 3 Recharge Pit of (1.5m x 1.5m x depth 2m)	
17	EMP cost (including DMP cost)		Capital Cost: Rs. 194.55 Lacs + DMP ó 8.45 Lacs O & M cost : Rs. 35.27 Lacs/annum + 0.538 Lacs/annum	
18	No. of trees to be cut		4	
19	No. of tress to be planted on site		569 Nos. + 44 Nos. existing trees	
20	No. of trees to be cut		2 Nos. of trees may be cut from Phase-III	
21	No. of trees to be planted on site		250 Trees / Plants.	
22	CRZ status		Not Applicable	
23	CRZ status		Not Applicable	

Decision: Authority after detailed discussion and deliberation and considering the recommendation from the Goa-SEAC decided to conduct site inspection of the proposed project.

4. Residential development at (**Plot H1**) by Goa Housing Board at Colvale, Bardez, Goa The project Proposal was discussed on the basis of documents submitted by the proponent. All issues related to environment including air, land, soil, ecology and biodiversity and social aspects were discussed. Committee noted that the project is under **8a (B2) category of EIA Notification 2006 (building & constructions)**. Further documents like Consolidated statements, Form I and IA. Brief extract of the project details submitted by Project Proponent is as below:

Sr.No	Description	Details
1.	Name & location of the project	Plot H1 Residential Development for Goa Housing Board at Colvale, Bardez North, Goa.
2	Plot Area	34,574 sqm
3	Net Plot Area	34,574 sqm
4	FSI Area Non-FSI Area Total Construction Area Building Configuration & Height of Building	39,248.48 sqm 28,914.82 sqm 68,163.30 sqm 1BHK Apartment in Stilt + 7 floors Total Ht. of Bldg: 23.35m
5	No. of Shops	Nil
6	Total water requirement (construction / operation phase)	Domestic Water: 390 m3 / day Flushing from STP: 197 m3/day
7	Sewage Generation	469 m3 / day
	STP Capacity	509 m3 / day
8	Total Solid Waste Quantities	Bio Degradable: 817 kg Non Bio Degradable: 1225 kg
9	RG Area	Not Applicable as plot is part of a larger layout and RG provided for entire layout. Open green of 1640 sq.m provided internally
10	No. of Trees	NA
11	Energy Efficiency	NA
12	Parking 4W and 2W	4 W: 846 nos
13	Power Requirement	3.0 MW
14	D.G. set Capacity	1 no 500 KVA
15	RWH tank Capacity	Tank not Provided. 23nos recharge pits provided.
16	EMP cost (including DMP cost)	NA

17	No. of Trees to be cut	NA
18	No. of Trees to be planted on Site	As per Bio Diversity Report
19	CRZ Status	Not Applicable

Goa-SEAC conducted site inspection on 12th May 2018 wherein the committee sought following compliances prior to call the proponent for presentation during 95th Goa-SEAC meeting on 22nd June 2018 and recommended to the Authority for grant of Environmental clearance:

Decision: The Authority after detailed discussion and after perusal of the documents submitted by the PP and recommendation from the Goa-SEAC the authority decided to recommend the said proposal for grant of Environmental Clearance (EC) under the provision of EIA notification 2006 (as amended) with following specific conditions :

- i. The Project Proponent (PP) has to carry out the development of open space as recommendation of by Goa State Biodiversity Board (GSBB) and the project proponent has to request GSBB asking for inputs on development of an open spaces.
- ii. 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.
- iii. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body..
- iv. E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
- v. 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.
- vi. The Project Proponent shall utilise fly ash bricks in masonry works.
- vii. The PP shall use construction debris for land filling wherever applicable.
- viii. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- ix. 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.

- x.** 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.
- xi.** 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.
- xii.** Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xiii.** 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.
- xiv.** 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 from the sewage treatment plant will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- xv.** PP should implement Dust mitigation measures for construction activities such as:
 - a. Roads leading to or at construction sites must be paved and blacktopped (i.e. metallic roads).
 - b. No excavation of soil shall be carried out without adequate dust mitigation measures in place.
 - c. No loose soil or sand or Construction & Demolition Waste or any other construction material that causes dust shall be left uncovered.
 - d. Wind-breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided.
 - e. Water sprinkling system shall be put in place.

- f. Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.
- g. New serial number 1070 has been inserted which relates to Mandatory Implementation of Dust Mitigation Measures for all Construction and Demolition Activities:
- h. Grinding and cutting of building materials in open area shall be prohibited.
- i. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
- j. No uncovered vehicles carrying construction material and waste shall be permitted.
- k. Construction and Demolition Waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site.

5. The proposed residential development for Goa Housing Board at Colvale, Bardez. (**Plot H2**). The project Proposal was discussed on the basis of presentation made and documents submitted by the proponent. All issues related to environment including air, land, soil, ecology and biodiversity and social aspects were discussed. Committee noted that the project is under **8a (B2) category of EIA Notification 2006 (building & constructions)**. Further documents like Consolidated statements, Form I and IA, site inspection held on 12th May 2018 project specific presentation and plans submitted are taken on the record. Brief extract of the project details submitted by Project Proponent is as below:

Sr.No	Description	Details
1.	Name & location of the project	Plot H2 Residential Development for Goa Housing Board at Colvale, Bardez North, Goa.
2	Plot Area	22,503 sqm
3	Net Plot Area	22,503 sqm
4	FSI Area Non-FSI Area Total Construction Area Building Configuration & Height of Building	25,865.72 sqm 15,081.91 sqm 40,947.63 sqm 1BHK Apartment in Stilt + 7 floors Total Ht. of Bldg: 23.35m
5	No. of Shops	Nil
6	Total water requirement (construction / operation phase)	Domestic Water: 217 m3 / day Flushing from STP: 110 m3/day

7	Sewage Generation	268 m3 / day
	STP Capacity	284 m3 / day
8	Total Solid Waste Quantities	Bio Degradable: 454 kg Non Bio Degradable: 681 kg
9	RG Area	Not Applicable as plot is part of a larger layout and RG provided for entire layout . Open green of 940 sqm provided internally
10	No. of Trees	NA
11	Energy Efficiency	NA
12	Parking 4W and 2W	4 W: 603 nos
13	Power Requirement	2.12 MW
14	D.G. set Capacity	1 no 320 KVA
15	RWH tank Capacity	Tank not Provided. 15nos recharge pits provided.
16	EMP cost (including DMP cost)	NA
17	No. of Trees to be cut	NA
18	No. of Trees to be planted on Site	As per Bio Diversity Report
19	CRZ Status	Not Applicable

Goa-SEAC conducted site inspection on 12th May 2018 wherein the committee sought following compliances prior to call the proponent for presentation during 95th Goa-SEAC meeting on 22nd June 2018 and recommended to the Authority for grant of Environmental clearance:

Decision: The Authority after detailed discussion and after perusal of the documents submitted by the PP and recommendation from the Goa-SEAC the authority decided to recommend the said proposal for grant of Environmental Clearance (EC) under the provision of EIA notification 2006 (as amended) with following specific conditions :

- i. The Project Proponent (PP) has to carry out the development of open space as recommendation of by Goa State Biodiversity Board (GSBB) and the project proponent has to request GSBB asking for inputs on development of an open spaces.
- ii. 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.
- iii. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body..
- iv. E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.

- v. 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.
- vi. The Project Proponent shall utilise fly ash bricks in masonry works.
- vii. The PP shall use construction debris for land filling wherever applicable.
- viii. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- ix. 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.
- x. 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.
- xi. 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.
- xii. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xiii. 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.
- xiv. 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 from the sewage treatment plant will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- xv. PP should implement Dust mitigation measures for construction activities such as:
 - 1. Roads leading to or at construction sites must be paved and blacktopped (i.e. metallic roads).

- m. No excavation of soil shall be carried out without adequate dust mitigation measures in place.
- n. No loose soil or sand or Construction & Demolition Waste or any other construction material that causes dust shall be left uncovered.
- o. Wind-breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided.
- p. Water sprinkling system shall be put in place.
- q. Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.
- r. New serial number 107ø has been inserted which relates to Mandatory Implementation of Dust Mitigation Measures for all Construction and Demolition Activities:
- s. Grinding and cutting of building materials in open area shall be prohibited.
- t. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
- u. No uncovered vehicles carrying construction material and waste shall be permitted.
- v. Construction and Demolition Waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site.

6. The Authority perused the reply to the Show Cause Notice dated 21/05/2018 from M/s **Umia Developers Pvt. Ltd.**, - for the proposed developmental activity in Sancoale area. The authority noted that in its 43rd Goa-SEIAA meeting held on 20/04/2018 the PP was asked to submit NOC from the D.G.C.A. and PWD. However the same has not been enclosed. Accordingly PP is directed to submit documents as sought in Show Cause Notice within 2 weeks. Further the submission of PP that construction has been carried out is as per the recommendation of Goa-SEAC was taken into consideration. However in order to ascertain whether the construction is as per the recommendation of Goa-SEAC, the authority sought a report and confirmation from Goa-SEAC within 10 days.

7. The authority decided to ask Town and Country planning (TCP), Panaji, North Goa Planning & Development Agency, South Goa Planning & Development Agency Mormugao Goa Planning & Development Agency to submit details of all the projects where the Built up area exceeds

(>20,000 sq. mts) which comes under (Category B2) *Building & construction* and permission has been granted by them.

Meeting concluded with a vote of thanks to the chair.

Sd/-

Adv. Joseph Vaz
Member, Goa-SEIAA

Sd/-

Mr. Ravi Jha
Member Secretary, Goa-SEIAA

Sd/-

Mr. Vivekanand L. Sawkar
Chairman, Goa-SEIAA

Place: Patto, Panaji

Date: July 2018

ANNEXURE – I

List of Members who attended the 44th Goa-SEIAA meeting held on 16th July 2018

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| 1. Mr. Vivekanand L. Sawkar | Chairman, Goa-SEIAA |
| 2. Adv. Joseph Vaz | Member, Goa-SEIAA |
| 3. Mr. Ravi Jha | Member Secretary, Goa-SEIAA |