Minutes of the 121stGoa State Expert Appraisal Committee (Goa-SEAC) meeting held on 26th May 2020 at 4.00 pm in the Conference Room of the 3rd floor, GTDC, Patto-Panaji, Goa.

The hundred and twenty first meeting of the Goa-SEAC was held on 26^{th} May 2020 in the Conference room of the GTDC, ParyatanBhavan, Panaji at 04.00 pm under the Chairmanship of Prof. Suhas Godse. The list of members who attended the meeting is at \tilde{o} <u>Annexure – 1</u> \tilde{o} .

At the beginning Chairman welcomed the members and requested Secretary, SEAC to proceed as per the Agenda items ($\underline{refer\ Annexure-2}$).

- 1. Compliances received from Goa State Infrastructure Development Corporations(GSIDC) for construction of New High Court Complex at Penha de Franca, Porvorim, Goa was taken up for discussion. The committee after perusing the said compliances, sought an additional compliances with regards to following:
 - a) PP has to clarify regarding use of both accesses i.e. for judges and public to be utilised during emergency
 - b) PP has to identify provision of second emergency vehicular gate for the movement of vehicles and public in future considering the requirements of safety during emergency.
 - c) There should be no emergency assembly point on any floor except ground floor as shown in newly submitted drawing. The PP should make necessary corrections in the drawings and submit revised drawings for the same.
- 2. Compliances received from Mr. Domnic Fernandes for minor mineral quarry (new laterite stone quarry) in survey no. 39/0 village Cola, Canacona, Goa were taken up for discussion. Brief details submitted by Project proponent are as below:

Serial Number	Item	Details
Number		
1.	Name of the Project/s	NAGURMA LATERITE QUARRY
2.	Name of the applicant	DOMNIC FERNANDES
3.	Name of quarry	NAGURMA LATERITE QUARRY
4.	Type of quarry	LATERITE STONE
5.	New/Expansion/Modernization/re	NEW
	newal	
6.	Existing Capacity/lease Area etc.	10000m3/Year, 1.8500Ha Area
7.	Category of Project i.e. 'A' or 'B'	B2
8.	Plot/Survey/Khasra No.	39/0
9.	Village	COLA
10.	District	South Goa
11.	State	Goa
12.	Area excavated	0.2664На
13.	Balance area available	1.5836На
14.	Proposed expansion capacity	New Project
15.	Raw material overburden ratio	1:0.3
16.	Location of Stack overburden	With in lease area backfilling
17. a	Proposed plantation plan	Backfilled and fringe area
18.	Tree plantation proposed species	As per enclosed list
	and number	
19.	Approached road	Existing
20.	Proposed/Existing road Page 1 c	f £9 isting unpaved of 1.5Km

	Paved/unpaved with length of road	
21.	Whether site has existing water body	No
22.	Number of trucks plying per day	6-7 trips in a day
23.	Details on storage of explosives used for blasting	No blasting will be carried out
24.	Google image with 1km radius and 5 km radius.	Enclosed
25.	Details/Drawing of proposed quarry plan	Surface Plan Enclosed

The committee after perusing the said compliances noted that the project proponent has submitted the revised tree plantation plan and a letter from the owner of land stating post closure the quarry boundary. Accordingly Committee after detailed discussion decided to recommend the project to Goa-SEIAA for grant of Environmental Clearance (EC) under the provision of EIA Notification 2006 with following conditions:

- 1. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. The lease boundary may be subsequently geo-referenced for precise positioning and ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.
- 2. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place on route.
- 3. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintaining hygiene surrounding the proposed lease boundary.
- 4. The lease holder shall undertake adequate safeguard measures during extraction of laterite stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Quarrying operations should be limited to **day-hours time** (06 a.m. to 06 p.m. only) with specified time reserved for -blasting@ Regular monitoring of groundwater levels and its physicochemical quality parameters shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (i.e. stream / river / pond / lake / reservoir / irrigational canal) should be monitored for similar parameters on quarterly basis and/or seasonally (i.e. pre-monsoon / monsoon and post-monsoon).
- 5. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
- 6. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (to be measures in January, April and November every-year) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively.

- 7. Green belt development shall be carried out considering CPCB guidelines including selection of plant species in consultation with Forest Department / Zonal Agricultural Office, as submitted along with application.
- **8.** The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of surface / groundwater from within the lease area.
- **9.** Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB.

Compliances received from **Kaloshi Granites** for minor mineral quarry (**new Basalt stone quarry**) in survey no. 12/1 village Damocem, Sattari, Goa and was taken up for discussion. The said quarry is proposed to the existing quarry bearing survey no. 12/1 Damochem, Sattari, Goa. Brief details submitted by Project proponent are as below:

Serial Number	Item	Details
26.	Name of the Project/s	KALOSHI GRANITES
27.	Name of the applicant	BYRON A XAVIER
28.	Name of quarry	DAMOCEM BASALT QUARRY
29.	Type of quarry	BASALT
30.	New/Expansion/Modernization/renewal	NEW
31.	Existing Capacity/lease Area etc.	18000m3/YEAR, 1.2914Ha Area
32.	Category of Project i.e. 'A' or 'B'	B2
33.	Plot/Survey/Khasra No.	12/1
34.	Village	DAMOCEM
35.	District	NORTH GOA
36.	State	GOA
37.	Area excavated	0.1174Ha
38.	Balance area available	1.1740На
39.	Proposed expansion capacity	New Proposal
40.	Raw material overburden ratio	1:0.5
41.	Location of Stack overburden	South western Portion of the lease
42.	Existing flora and fauna at site with details of species and nos of trees	As per enclosed list.
43.	Proposed plantation plan	And Dump Fringe Area
44.	Tree plantation proposed species and	600 trees of cashew and other fruit
	number	bearing trees
45.	Approached road	Existing
46.	Proposed/Existing road Paved/unpaved with length of road	Existing unpaved of 500m
47.	Distance from nearest Locality	1.3Km
48.	Distance from nearest metallic road	500m
49.	Distance from nearest water body	1.2Km Mhadai River
50.	Whether site has existing water body	No
51.	Number of trucks plying per day	5 to 6 trips in a day
52.	Details on storage of explosives used for	Holds a explosive Magazine
	blasting	licence for storage of 50kg
		explosive
53.	Google image with 1km radius and 5 km radius.	Enclosed
54.	Details/Drawing of proposed quarry plan	Surface Plan Enclosed

The committee after perusing the compliances submitted by project proponent decided to recommend the project to Goa-SEIAA for grant of Environmental Clearance (EC) under the provision of EIA Notification 2006 with following conditions:

- 10. Containers should have hazard sign board and explosives name and should be barricaded with a sign of entry for authorised persons only.
- 11. The lease holder should ascertain on-site demarcation and construction of lease boundary with cement poles / bio-fencing / barbed wire for the proposed leased area in question. The lease boundary may be subsequently geo-referenced for precise positioning and ground-truth verification. As such, the lease holder should ensure that minor mineral quarrying operations are restricted within the prescribed lease boundary.
- 12. The lease holder should ensure construction of approach road / proper access to enable transportation of quarried material from site to desired destination and/or crushing unit, as applicable. Transportation of quarried material shall be done by covering the trucks with tarpaulin so that no spillage of material / dust takes place on route
- 13. The lease holder should comply with the proposed plan of action / modus operandi for extraction of basalt stones within the available lease boundary limits in terms of provisions of Mines and Safety Rules / Guidelines, as applicable. In addition, safety gadgets and health-care facilities should be provided to workers vis-a-vis maintaining hygiene surrounding the proposed lease boundary.
- 14. The lease holder shall undertake adequate safeguard measures during extraction of basalt stone and ensure that due to this activity, the hydro-geological regime of the surrounding area shall not be affected / altered / polluted. Quarrying operations should be limited to **day-hours time** (06 a.m. to 06 p.m. only) with specified time reserved for ÷blastingø Regular monitoring of groundwater levels and its physicochemical quality parameters shall be carried out around the quarry lease area (for minimum two locations of permanent water sources / open well / borewell). If there are no groundwater sources, then nearest perennial surface water sources (*i.e. stream / river / pond / lake / reservoir / irrigational canal*) should be monitored for similar parameters on quarterly basis and/or seasonally (*i.e. pre-monsoon / monsoon and post-monsoon*).
- 15. No quarrying be carried out within the safety zone of any bridge and/or embankment as well as within the vicinity of natural / man-made archaeological site(s).
- 16. The lease holder shall implement air pollution control measures / dust minimizing initiatives / noise control measures, wherever applicable, within the lease area as well as establish adequate buffer zone around the lease boundary to minimize such pollution hazards. It should be ensured that the Ambient Air Quality (AAQ) parameters (to be measures in January, April and November every-year) as well as Noise parameters conform to the norms prescribed by the Central Pollution Control Board (CPCB) and Noise Pollution (Control) Rules, 2000 respectively.
- 17. Green belt development shall be carried out considering CPCB guidelines including selection of plant species in consultation with Forest Department / Zonal Agricultural Office, as applicable.
- **18.** The lease holder shall obtain necessary prior permission (NOC) from the Groundwater Cell of the Water Resources Department (WRD) for drawl of surface / groundwater from within the lease area.
- **19.** Waste water / effluents, if any, shall be properly collected, treated and monitored so as to conform to the standards prescribed by the MoEF / CPCB.

3. Compliances received from **Thousand Palms** at survey no. 143/1A-1a, Sancoale village, Marmugao, Goa by **M/s Ashoka Infraways Ltd** was taken up for discussion. Brief project details submitted by Project proponent are as below:

Project Proponent	ASHOKA INFRAWAYS LIMITED	
Name of the project	Thousand Palms	
	Survey No 143/1 A-1A SancoaleMarmugoa Goa	
Net Plot Area	Total Plot Area:15000 sqm BUA: 22398.39 sqm	
Proposed Built-up Area (FSI & Non-FSI)	(FSI + NON FSI) 14987.17+7411.22 22398.39 sqm	
Ground coverage	Ground coverage : 40% Permissible : 6000 sq mt Area covered : 4009.12sqmt	
No. of buildings	10 buildings	
Height of the building (s)	15 meter	
Total Water Requirement	Operation Phase: Fresh Water requirement: 162 cmd Fresh water: 96 cmd Treated water from STP: 107 cmd Total sewage generated: 119 cm	
Sewage Generation	Total sewage Generated: 119 KLD (STP Capacity 120KLD) MBBR technology	
Solid wastes	Operation Phase: Total solid waste : 471 kg/day	
Energy	Source:GEB Construction Phase :20 HP Operation Phase : Connected load : 3032 KW and demand load : 1558 KW DG Power Back-up: 1 Nos. of DG set capacity:200 KVA each 3 transformer of 500 KVA	
RG	2250 sqm	
Quantity of soil excavated	2870 sqmtrs	
Tree details	Trees on site: 42 nos	
	Trees to be cut: 21nos	
	Trees to be retained: 21 Nos	
	New trees to be planted: 343 Nos	

The committee after perusing the said compliances decided to recommend the project to Goa-SEIAA (Authority) with following specific conditions.

- i. PP should prioritize the health and hygiene issues in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- ii. Sewage Treatment Plant (STP) contract should be for minimum period of 5 years with operation and maintenance after commissioning /completion of project.
- 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 to enable installation of solar panels south facing.
- vi. The Project 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 for disposal. 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 shall make provision for charging points for electronic vehicles in the parking Area.

3. Project Proponent 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, sand, Construction and 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 $\pm 107 \phi$ has been inserted which relates to Mandatory Implementation of Dust Mitigation Measures for all Construction and Demolition Activities:
 - i. Grinding and cutting of building materials in open area shall be prohibited.
 - ii. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
 - iii. No uncovered vehicles carrying construction material and waste shall be permitted.
 - iv. Construction and Demolition Waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site.
- h. Further, progress will be reviewed after six months (minimum 3 times in a year) depending upon progress of the work. Further, the compliance to these conditions as and when submitted by PP will be verified /ascertained by the authority to propose additional conditions if any.
- 4. Compliances received from proposed construction of Hotel and swimming pool in survey no. 229/6 of village Anjuna, Bardez, Goa by Dhiraj Bakshi, Mr.Rakesh Dham, Bharti Sehgal, C/o Navint Arsekar was taken up for discussion before the committee. The committee after perusing the said compliances decided to recommend the said project proposal to Goa Coastal Zone management Authority (GCZMA) with following specific conditions:
 - i. PP should prioritize the health and hygiene issues in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
 - ii. Sewage Treatment Plant (STP) contract should be for minimum period of 5 years with operation and maintenance after commissioning /completion of project.
 - 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 to enable installation of solar panels south facing.
 - vi. The Project 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 uvalues shall be as per ECBC specifications.
- x. Project proponent should install biogas and use it for restaurant.
- xi. 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.
- xii. 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.
- xiii. Separation of grey and black water should be done by the use of dual plumbing system for disposal. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- xiv. 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.
- xv. 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.
- xvi. PP shall make provision for charging points for electronic vehicles in the parking Area.

2. <u>Project Proponent should implement Dust mitigation measures for construction activities such as:</u>

- i. Roads leading to or at construction sites must be paved and blacktopped (i.e. metallic roads).
- j. No excavation of soil shall be carried out without adequate dust mitigation measures in place.
- k. No loose soil, sand, Construction and Demolition Waste or any other construction material that causes dust shall be left uncovered.
- 1. Wind-breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided.
- m. Water sprinkling system shall be put in place.
- n. Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.

- o. New serial number :107ø has been inserted which relates to Mandatory Implementation of Dust Mitigation Measures for all Construction and Demolition Activities:
 - v. Grinding and cutting of building materials in open area shall be prohibited.
 - vi. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
 - vii. No uncovered vehicles carrying construction material and waste shall be permitted.
 - viii. Construction and Demolition Waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site.

The meeting ended with a vote of thanks to the chair.

Dr. PurushotamPednekar	Sd/
Dr. NitinSawant	Sd/
Dr. C.U. Rivonker	Sd/
Dr. M.K. Janarthanam	Sd/
Shri. Dominic Fernandes	Sd/
Sd/-	Sd/-
Shri. SanjeevJoglekar)	Shri. SuhasGodse
(Secretary Goa-SEAC)	(Chairman Goa-SEAC)

Place: Patto, Panaji

Date: May 2020

Annexure -I

List of members who attended 121st Goa-SEAC meeting held on 26th May 2020