

**Minutes of the 32nd Goa State Expert Appraisal Committee
(Goa-SEAC) meeting held on 24th February 2015 at 10.00 a.m. in the
Conference Room of the Goa State Pollution Control Board (GSPCB),
Patto, Panaji**

The thirty-second meeting of the Goa State Expert Appraisal Committee (*Goa-SEAC* – hereinafter referred as ‘Committee’) was held on 24th February 2015 in the Conference room of the GSPCB at 10.00 a.m. under the Chairmanship of Mr. Antonio Jaime Afonso. The list of members who attended the meeting is annexed (*refer “Annexure – 1”*).

At the outset, Chairman welcomed the Members and requested Secretary of the Committee to proceed as per the Agenda item (*refer Annexure – 2*).

On receipt / submission of the Draft Final Environment Impact Assessment (EIA) report from the Project Proponent (PP) - Department of Science & Technology – DST, Goa on 12th February 2015, *following the issuance of Terms of References (ToRs)* in March 2014 *vis-a-vis presentation on Preliminary Status Report by M/s NEERI, Nagpur before the joint meeting during September 2014*, prepared towards setting up of Common Municipal Solid waste Management Facility (CMSWMF) at Saligao/Calangute, the same was perused and deliberated and accordingly, the following observations are submitted –

1. As per the prescribed ToRs’ communicated, the PP has not submitted / included the information on (a) the Executive Summary, (b) disclosure of environmental consultants concerned and (c) ToR-wise compliance statements, preferably in a tabular format.
2. In addition, the EIA report does not mention about –
 - (i) Water balance calculations including usage of treated waste-water, if any.
 - (ii) Standard permissible limit applicable for heavy metals analyzed in soils.
 - (iii) Waste Management Plan (*refer Fig 1.2 from the report*) is not clear and cannot be comprehended and deciphered for the purpose of process appraisal.
 - (iv) Locations of sampling stations (air / water parameters) not indicated on a Map/ Toposheet enclosed.
 - (v) Drainage network plan, proposed rain-water harvesting, proposed greenbelt development plan, modalities proposed to be adopted for

remediation for contaminated soil, details of fire protection systems and technical details of the proposed landfill site.

(vi) Energy conservation measures with calculations.

3. Biological environment

- (i) This section in EIA report is replete with generic statements, lacking site specificity.
- (ii) Inventories are largely based on outdated secondary database dating back to 1979- 80 and 1988-89.
- (iii) contrary to initial claim that the site is ecologically degraded and with occurrence of little biodiversity, the inventories submitted in the EIA report shows presence of species of very high conservation value such as Barking deer, Indian Bison, Wild Boar and Sambar. All of these figures in the Scheduled list of Indian WildLife (Protection) Act, 1972 and its subsequent Amendments, thereby inviting conservation initiatives on part of the PP, including preparations of a comprehensive Wild Life Conservation Plan in consultation with the State Forest Department.
- (iv) Listing of Rhesus monkey (*Macaca mualata*) as observed in the study area is a new record/reporting in the State of Goa, as this species has not been reported hitherto earlier from the state of Goa and its presence is highly unlikely as it associates with a different bio-geographic Zone.
- (v) The inventory of avifauna (*refer table 3.5.5 from the report*) lists endemic species within the study area, such as Malabar Grey Hornbill and Niligiri Wood Pigeon. Such a inventory implies rich avifaunal diversity in the study area warranting appropriate conservation initiatives and interventions by the PP including periodic monitoring of species diversity in the core and the buffer zone.
- (vi) None of the biodiversity inventory mentions the IWPA, 1972 / IUCN status of species observed / reported.
- (vii) It is observed that the plant species proposed for Greenbelt development / plantation are listed from general CPCB guidelines and as such are not of local relevance. The list may be revised by prioritising local, tall 'broadleaved species' and dense foliage.
- (viii) Given the existing standing state of 'Heavy metals' in the soil and rich bird diversity at the site, it is strongly recommended to avoid any fruit-bearing trees in the greenbelt development for reasons of a possible heavy metal transfer and bio-magnifications through a food chain.

4. The National Ambient Air Quality (NAAQ) standards cited in the EIA report date back to 1994, whereas such National-level AAQ standards have been revised by the CPCB in year 2009.
5. Considering the highly polluted status of Salmona spring which is in the zone of influence of project site, the SEAC desires that PP /concessionaire shall take upon themselves the onus of preventing leachate from the existing dumpsite, putting in place measures to intercept land runoff from the site during season of precipitation and Remediation of spring water.
6. Mitigation measures for existing on-site waste in a phased manner with reference to baseline parameters during construction and operations of the plant to be clearly stated.
7. For post-project monitoring, location for air pollution, water sampling (*including test bore wells at the site*), and treated wastewater sampling locations and parameters to be specified.
8. A Disaster and Emergency Assessment Plan with specific references in terms of anticipated disasters/accidents should be prepared alongwith an emergency response protocol.
9. Environment Management Plan (EMP) during construction and operation phase should be added in a tabular format with clear demarcation of responsibilities for PP/Concessionaire (*i.e as per the tripartite agreement*).
10. Environment Management Plan (EMP) budget in terms of capital cost and recurring cost should be clearly stated.
11. Environmental Management Plan (EMP) should be made an integral part of “tripartite of concessionaire agreement” for effective post-project implementation and monitoring.

The meeting ended with vote of thanks to the Chair.

Dr. Manoj R. Borkar _____ Sd. /- _____

Mrs. Anita A. B. Barreto _____ Sd. /- _____

Shri. Suhas N. Gaonkar _____ Sd. /- _____

Dr. Jaganath Hirkude _____ Sd. /- _____

Dr. Purnanand P. Savoikar

_____ Sd. /- _____

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

Sd. /-
Mr. Antonio Jaime C. Afonso
Chairman, Goa-SEAC

Place: Patto, Panaji

Date: February 2015

ANNEXURE – 1

**List of members who attended the thirty-second Goa-SEAC meeting held on 24th
February 2015**

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| 1. Mr. Antonio Jaime C. Afonso | Chairman |
| 2. Dr. Manoj R. Borkar | Member |
| 3. Mrs. Anita A. B. Barreto | Member |
| 4. Shri. Suhas N. Gaonkar | Member |
| 5. Dr. Jaganath Hirkude | Member |
| 6. Dr. Purnanand P. Savoikar | Member |
| 7. Dr. Mohan R. Girap | <i>Secretary</i> |