Minutes of the 21st Goa State Environment Impact Assessment Authority (Goa-SEIAA) held on 26th February 2015 at 10.30 a.m. in the Conference room of the EIA Secretariat, O/o Goa State Pollution Control Board (GSPCB), Patto.

The twenty first meeting of the Goa-SEIAA (hereinafter referred to as 'Authority') was held on 26^{th} February 2015 from 10.30 a.m. onwards in the Conference room of the Goa-PCB under the Chairmanship of Dr. Pramod Pathak. The list of members is annexed (<u>refer Annexure – 1</u>). At the outset, Chairman welcomed the Members and proceeded as per the Agenda item (<u>refer Annexure-2</u>).

A. Submission of EIA Report by M/s NEERI, Nagpur and prescribing post-EC monitoring conditions to the Project Proponent (PP).

The Authority has perused the entire report prepared by M/s NEERI, Nagpur including site specific conditions and all other relevant and material factors including ascertaining the feasibility of alternate site which has been requested by Comunidade of Saligao and not found suitable for MSW management for setting up of a CSWMF as per Annexure-1 to the Environmental Impact Assessment report. It is of material importance to also consider the fact that there has been indiscriminate dumping of MSW since past more than 20 years, which has affected the area considerably, degrading the same.

In this regard the Environmental Impact Assessment (EIA) report prepared by M/s NEERI, Nagpur mentions the following:-

- a. There will be a health and lifestyle improvement due to scientific disposal of municipal solid waste, which otherwise is being dumped unscientifically creating unhygienic conditions and vector for various diseases which could spread in the surrounding residential areas.
- b. The Health Officer, Department of Health Services, Government of Goa has issued directions under Section 40 of the Goa Public Health Act to ensure that the work for setting up of Solid Waste Management Facility is taken up at top priority at first instance to ensure that existing waste at site is immediately treated and remediated to improve the health and hygiene and the quality of ground water in the said area.
- c. It is also informed that the site bearing Survey No. 47/1, Village Calangute has been identified as a garbage management site in the Regional Plan notified in the year 2021 by the Government of Goa.
- d. EIA Report further states a holistic approach has been followed while planning the integrated Municipal Solid Waste treatment facility in North Goa and the proposed facility will be a state of art modern facility based on mechanical-biological treatments process with proper segregation and bio-methanation technology and the

- said technology selected is as per the requirement of MSW Rules, 2000 and in accordance with the guidelines of the Central Pollution Control Board.
- e. Report states that it is prudent to establish a solid waste management facility on a land/site which is degraded due to dumping of waste or immediately adjacent to the said site rather than selecting a green field site for establishment of the same.
- f. It is informed that the Communidade of Saligao had suggested an alternate site. Accordingly, joint site-inspection conducted by officials of the Department of Science and Technology, Town and Country Planning Department, Directorate of Land Survey and Records and representatives of the Communidade of Saligao has indicated that the alternate site being a green site was not suitable for setting-up of a Solid Waste Management Facility.
- g. Report mentions that there is a presence of volatile organic carbons (VOCs') near the existing dump sites clearly substantiating the existence of uncontrolled petrifaction of mixed municipal solid waste at the site.
- h. The report also mentions that the 'Salmona spring' water is contaminated with coliforms when compared to other surface and ground water sample. The Bacteriological contamination observed in the Salmona spring and open wells, situated downstream to the existing dump site clearly indicates the negative impact of existing dump sites on water environment this is attributed to the surface run off from the dump site over the areas.
- i. EIA Report predicts the following positive impacts on the Site and the surrounding due to the establishment of the said proposed Solid Waste Management Facility
 - 1. Salmona Spring water quality will improve due to the proper scientific management of the solid waste and also the treatment of the existing old dumped un-segregated solid waste at the site.
 - 2. The quality of the soil which is presently degraded will be restored upon remediation/treatment and disposal of the existing waste dumped at the site
 - 3. Upon commissioning of the said facility there will be improvement on the esthetics of the said area.
 - 4. Report also does not predict any significant negative impact due to the establishment of the said facility.
- j. The PP has made the provision to treat the combined wastewater in a separate effluent treatment plant (ETP) equipped with reverse osmosis (RO) system to ensure efficient recycle of water within the proposed CMSWMF. Wastewaters generated from non-plant use washing and other processes are treated at ETP and shall be used in floor washing, dust suppression, if required and development of green belt. These will ensure to be a zero discharge model and it will improve the water quality of the 'Salmona Spring' which is contaminated due to the leachate seepage from the existing MSW dumpsite.
- k. The existing dumpsite is being used for unscientific dumping of mixed MSW by nearby Panchayats for last 20 years and is severely contaminated, thereby posing

serious risk to air, soil, surface water, and groundwater resources in and around the existing site.

1. As per the joint inspection report by the Department of Science and Technology (DST), Town and Country Planning (TCP) Department, Directorate of Land Survey and Records (DSLR) and Communidadae of Saligao, the proposed alternate site was not found suitable /feasible for the MSW management.

Accordingly, the Authority hereby accepts the EIA report and decides that on-site work can be undertaken subject to fulfilment of the conditions laid down as under.

1. The critical/minimum operational mass/capacity for keeping the plant in operation do not become a part of EIA. As such, the plant treatment capacity has been proposed as 100 MT per day. It is expected to process the daily input of municipal solid waste from the surrounding areas and also to process the earlier accumulated waste. The accumulated waste itself will need processing for years together so the plant operation can continue for few years without short supply of raw material. It is bound to make a positive and restorative impact on the surrounding which is seen in the report submitted.

However, as suggested by Goa-SEAC, the PP and consultant (M/s NEERI, Nagpur) can make an assessment of the quantity of waste accumulated and submit as an addendum.

- 2. The PP will have to make arrangement for periodic assessment of the landfill quality as the ground water changes over the period of time, so the long term plan for site specific hydro-geological assessment should be submitted by the PP in coordination with the environmental consultant. In order to keep track of ground water quality over a long period of time, hydro-geological assessment, setup details, time frame for its periodic assessment should also be submitted by the PP. Further, the requisite clearance / NOC from the Ground Water Cell of the State Water Resources Department (WRD) shall be obtained and furnished.
- 3. EMP budget is not a part of EIA report. The PP while assessing the technology and the capital cost for plant recurring must have taken this cost as a part of installation maintenance and operation.
- 4. As per the PP, Fire Risk Assessment has been anticipated and appropriate measures for control of fire risk, etc. are listed in project plan as a part of fire risk assessment and disaster plan. Further details are to be worked out during detailing of the plant setup which is in the process of finalisation .On receiving the plan, same may be submitted to the Authority.
- 5. Operational part of the plant equipment handling is dealt in the EIA report $(refer\ section 2)$ and it should be complied.

6. Surface drainage plan, details of remediation measures proposed for

contaminated soil shall be submitted.

7. Appropriately authenticated documents accessed from the statutory agencies

concerned for preparation of biodiversity inventories shall be submitted.

The tripartite concessionaire agreement for effective implementation of EMP

(refer Section – 5, pg. no.5) for effective implementation should be submitted

to the Authority before commencing the plant operation.

9. All subsequent compliance documents shall be appropriately authenticated and

signed by the concerned consultant / statutory agencies.

B. Proposal for grant of prior EC towards renewal of minor mineral quarry lease

(1.00 Ha.) of M/s Samrat Industries, Quepem – The Authority accepts the

recommendations forwarded by the Goa-SEAC, subsequent to its decision during

its 29th meeting held on 20th January 2015, with reference to the aforesaid

proposal in survey. no. 23/P in Rumberem Village, Sanguem Goa and has

considered the same for grant of prior EC as per the provisions of the EIA

Notification, 2006.

The meeting ended with vote of thanks to the Chair.

Sd/-

Mr. Vivekanand L. Sawkar

Member, Goa-SEIAA

Sd/-

Mr. Srinet N. Kothwale

Member Secretary, Goa-SEIAA

Dr. Pramod V. Pathak Chairman, Goa-SEIAA

Sd/-

Place: Patto, Panaji

Date: 26th February 2015.

ANNEXURE – 1

List of members who attended the Twenty first Goa-SEIAA meeting held on 26th February 2015

1. Dr. Poramod V. Pathak - Chairman

2. Mr. Vivekanand L. Sawkar - Member

3. Mr. Srinet N. Kothwale - Member Secretary