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BEFORE THE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI

O.A. No. 199/ 2014

ALMITRA H. PATEL & ORS.-- Appellant

Versus

UNION OF INDIA & ORS.. -- Respondent

Sr. No.	Description	Page No.
1.	Prior Environmental Clearance dated 03.03.2015 issued by the Goa State Environment Impact Assessment Authority (G-SEIAA) for the proposed Solid Waste Management Facility at Calangute/ Saligao, North Goa	7399 to 7404
2.	Minutes of the Eighth Meeting of the High Level Task Force (HLTF) on Solid Waste Management in the State of Goa held on 25.02.2015	7405 to 7422
3.	Action Plan for Solid Waste Management for the	7423 to 7429

46p

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	State of Goa as approved in the Eighth Meeting of the HLTF dated 25.02.2015	
4.	Order of Constitution of the High Level Task Force on Solid Waste Management in the State of Goa	7440 710 7441

Date

Place

MS. BANSUMI SHARMA
ADVOCATE FOR THE STATE

7399

GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

EIA-Goa State Secretariat,
3rd Floor, Dempo Towers,

Phone nos.: 0832-2438303 Fax. no.: 0832-2438567

e-mail: goaseac@gmail.com

No: 3 - 181 - 2010/STE-DIR/91

Date: 3rd March 2015

To,

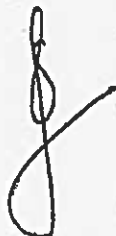
The Director,
Department of Science and Technology (DST),
Opposite Saligao Seminary,
Saligao, Bardez, Goa - 403 512

- Sub.: Establishment of Solid Waste Management Facility (SWMF) at Calangute/ Saligao,
Bardez Taluka, North Goa - Issuance of the Prior Environmental Clearance (EC) - Reg.

Ref: (a) This office letter no. 3 - 181 - 2010 / STE / DIR / 64 dated 4th November 2014.
(b) Your letter no. 3-209-2015/STE-DIR/Part16B / SWMC / 46 dated 12th February 2015

Sir,

Whereas the Department of Science and Technology (DST), Goa having approached this Authority (i.e. Goa-SEIAA), seeking prior environmental clearance (EC) for establishment of a Solid Waste Management Facility (SWMF) at Calangute/Saligao, Bardez Taluka, North Goa district, Goa. The matter, at the relevant time, was considered by the Goa State Expert Appraisal Committee (Goa-SEAC) and pursuant to the site visit and recommendations, this Authority had considered to accord prior Environmental Clearance (EC) to the project under the provisions of the Environmental Impact Assessment (EIA) Notification, 2006 under peculiar circumstances inasmuch as the entire area was found to be completely degraded and required immediate remediation measures as stated in preliminary status report of M/s National Environmental Engineering and Research Institute (NEERI), Nagpur which was also placed before the Goa-SEAC and this Authority, pursuant to which the prior Environmental Clearance (EC) was granted with 'Specific Conditions' to Project Proponent (PP) and to compile / submit a rapid site specific Environmental Impact Assessment (EIA) report to this Authority not later than 15th February 2015 so as to suggest further long term measures. It was further stipulated that on receipt and perusal a rapid site-specific EIA report, the conditions stipulated in the EC would be



7400

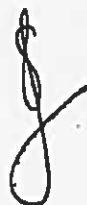
reviewed and accordingly modified for mandatory compliance by PP towards long-term management / post-EC monitoring of the site together with several other General Conditions.

And whereas a final Environmental Impact Assessment (EIA) Report has been prepared by M/s NEERI, Nagpur and submitted before the Goa-SEAC as well as this Authority. Whereas this Authority, during its 21st meeting held on 26th February 2015, 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. The report also 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 Comunidade 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 Comunidade 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. EIA Report mentions that there is a presence of volatile organic carbons near the existing dump sites clearly substantiating the existence of uncontrolled petrification 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. I state that the 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.

7402

- 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.
- l. 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 (DSLRL) and Communitadael of Saligao, the proposed alternate site was not found suitable /feasible for the MSW management.

After considering the matter from all necessary and relevant angles and after perusal of the Environmental Impact Assessment (EIA) report prepared by M/s NEERI, Nagpur and upon examination of the entire matter afresh, and after perusing the recommendations of the Goa-SEAC, this Authority has decided to accord a environmental clearance (EC) to the said project in accordance with the provisions of the Environmental Impact Assessment (EIA) Notification 2006, subject to compliance of the following 'General Conditions'.

1. The PP should comply with all the measures towards environment management as envisaged and documents in the Tender Document (*i.e. Concept Note and the Request for Proposal (RFP)*).
2. PP should comply with the terms and conditions as stipulated by the Goa State Pollution Control Board (GSPCB) while issuing Consent to Establish under the Air and Water Acts as well as Authorization issued under the Municipal Solid Waste (*Management and Handling*) Rules, 2000.
3. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal & treatment / air & water pollution / waste-water management.
4. PP should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local site-specific plant species and which are not alien to the local environment. In any case, no varieties of *acacia* be used either as avenue plantations or as live-fencing.
5. PP should also submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion so as to enable project monitoring during the construction phase.



7403

6. In the event of a modification / alteration / expansion in the project profile or change in the implementing agency / executing agency, a fresh reference shall be made to this Authority / Regional Office of the Ministry of Environment, Forests and Climate Change (MoEF&CC), as applicable.
7. Project proponent shall advertise at least in two local newspapers widely circulated in the region, one of which shall be in the Konkani or Marathi language within seven days of the receipt of this letter, informing that the project has been accorded prior Environmental Clearance (EC).
8. The Authority reserves the right to add any stringent conditions or to revoke the EC, if conditions stipulated are not implemented / complied with to the satisfaction of the Authority or for that matter, for any other reasons such as submission of false and misleading information, etc.,
9. Validity of the Environmental Clearance (EC) accorded shall be for a period of 05 (five) years from the date of issue of this letter.
10. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (Central Act 19 of 2010).

In addition, following 'project-specific conditions' need to be complied with by the PP:

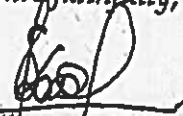
- a. The PP shall make arrangement for periodic assessment of the landfill quality as the ground water changes over the period of time, so the long-term plan for site specific hydro-geological assessment should be submitted in coordination with the M/s NEERI, Nagpur. In order to keep track of groundwater quality over a long period of time, hydro-geological assessment, setup details, time frame for its periodic assessment should also be submitted. Further, the requisite clearance / NOC from the Ground Water Cell of the State Water Resources Department (WRD) shall be obtained and furnished, as applicable.
- b. The PP shall get the site conditions / physico-chemical parameters (i.e. pH, microbial contamination, metal content, etc.,) monitored during all the stages of construction activity vis-à-vis post-construction operational phase with specific reference to 'Salmona spring' at regular intervals.
- c. The tripartite concessionaire agreement for effective implementation of EMP (refer EIA report: Section - 5, pg. no.5) for implementation should be submitted to the authority before commencing the plant operation.



7A04

- d. Appropriately authenticated documents accessed from the statutory agencies concerned for preparation of biodiversity inventories shall be submitted.
- e. All compliance documents shall be appropriately authenticated and signed by the concerned consultant / statutory agencies and complied.

Yours faithfully,



(Srinet Kothwale)

Member Secretary, Goa-SEIAA

Copy for favour of information to:

1. O. S. D. to Hon'ble Chief Minister, Secretariat, Porvorim, Goa.
2. O. S. D. to Hon'ble Minister for Environment, Secretariat, Porvorim.
3. P.S. to Principal Secretary (Environment), Secretariat Complex, Alto-Porvorim.
4. Chairman, Goa State Pollution Control Board, Dempo Towers, 2nd Floor, Patto, Panaji, Goa - 403 001
5. Chairman, Goa-SEIAA, Satyam, Pundalik Nagar, Behind Sanjay School, Porvorim - 403521.
6. Chairman, Goa-SEAC, Bairo Foro, St. Istevam, Tiswadi - 403 106.
7. Deputy Director (IA Division), Ministry of Environment, Forests and Climate Change (MoEF & CC), Paryavaran Bhavan, C.G.O. Complex, Lodhi Road, New Delhi - 110 510.
8. The Chief Conservator of Forests, Regional Office (South Zone), Ministry of Environment, Forests and Climate Change (MoEF & CC), Kendriya Sadan, 4th Floor, Environment and Forests Wing, 7th Main Road, II-Block, Koramangala, Bangalore - 560 034.
9. The Managing Director, Goa State Infrastructure Development Corporation Limited (GSIDCL), Panaji, Goa.

7405

MINUTES OF THE EIGHTH MEETING OF THE HIGH LEVEL TASK FORCE ON SOLID WASTE MANAGEMENT IN THE STATE OF GOA HELD IN THE CONFERENCE ROOM OF THE MINISTERIAL BLOCK OF THE SECRETARIAT, PORVORIM ON 25.02.2015 AT 3.30 PM

Attendance: List Enclosed

The Eighth meeting of the High Level Task Force chaired by the Hon'ble Chief Minister Shri Laxmikant Parsekar was held on 25th February 2015 at the Conference Hall of the Ministerial Block, Secretariat, Porvorim.

At the outset, Shri Levinson Martins, Member Secretary, Goa State Pollution Control Board and Member Convenor, High Level Task Force on Solid Waste Management (HLTF-SWM) welcomed all the members and a Power point presentation was made before the Task Force.

With respect to the Minutes of the Seventh Meeting of the HLTF held on 22.01.2015, the Additional Secretary (Finance) requested a rectification in Agenda No. 1, at para 4, line 3, which may be read as "about 1.8 crore Rupees has been collected as the Goa Non-biodegradable Garbage Control Cess under the Goa Non-biodegradable Garbage (Control) Act 1996". Similarly, para 4, line no. 5&6 may be read as "collected Rs 15 crores as the Goa Cess on Products and Substances causing Pollution (Green Cess) Act, 2013".

AGENDA ITEM NO. 1: Revision of the Action Plan for Solid Waste Management for the State of Goa w.r.t. O.A. No. 199/2014 (Almitra H. Patel V/s Union of India and Ors.)

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In the Original Application No. 199 of 2014, Almitra H. Patel V/s Union of India and Ors, the National Green Tribunal (NGT) has given directions to the State vide its Order dated 15.01.2015 to submit a Solid Waste management Plan for the State of Goa, referring to the Action Plan outlined in the judgement

Thereafter as suggested by the Hon'ble NGT, after studying the Action Plan submitted by the State of Punjab in Appeal No. 70/2012 (Capt. Mall Singh & Ors. Vs. Punjab PCB & Ors.), the State prepared a Draft Status Report and Integrated Roadmap Document regarding Solid Waste Management for presenting before the Hon'ble NGT and the same was approved by the High Level Task Force in its 7th Meeting held on 22.01.2015.

However in its judgement dated 05.02.2015, the Hon'ble NGT directed all States to re-submit an Action Plan within three weeks after considering the Guidelines to be uploaded by the CPCB within two weeks from the date of passage of the Order. Accordingly, the CPCB uploaded a "Suggestive/Indicative Action Plan for Management of Municipal Solid Waste" on its website on 19.02.2015. Shri Martins outlined the salient features of the CPCB-suggested Action Plan which include the following:

1. The Guidelines indicate formulation of State and City Level Action Plans for Solid Waste Management

7/1/87

2. Different methodologies for SWM based on the Quantum of Waste Generation (Classification into categories such as >500 TPD, 100-500 TPD, < 100 TPD, < 50 TPD, etc.) have been indicated in the said Plan
3. Components to be covered in the Action Plan include Authorization, Collection, Segregation, Storage, Transportation, Processing & Disposal of Waste, etc.
4. Indicative guidelines for formulation of the Action Plan includes Timelines to be followed w.r.t. different aspects including preparation of Detailed Project Reports (DPRs) by the Municipal Authorities, Survey/Assessment for quantification & characterization of waste generated, collection, segregation, storage, transportation, processing & disposal of waste and rehabilitation of old dumpsites.

It was expressed that the quantum of waste generation considered in the CPCB Action Plan cannot be compared to the waste generation in the State and in general, the State having only 190 Panchayats, 13 Municipal Councils and 1 Corporation needs to formulate and have its own Action Plan owing to differences in the geography, demography, etc. Shri Martins explained that the CPCB guidelines had been studied and thereafter, the following modifications are proposed to be made to the Action Plan approved in the 7th Meeting of the HLTF:

1. Due to differences in the modalities, region, location, demography, etc. the CPCB guidelines may not be directly applicable to the State of Goa.

7408

2. However, the Action Plan to be revised should consider the Cluster Approach as suggested by CPCB.
3. Inclusion of the status of Solid Waste Management in the Municipal Councils/Corporation w.r.t points such as Authorization from GSPCB, setting up of landfill sites, status of door-to-door collection, etc. as reported by the GSPCB which indicates non-compliance
4. Inclusion of the Concept Note for the Solid Waste Management Facilities at Calangute/Saligao which is under construction, the proposed facilities at Cacora & Bainguinim, to indicate that the plants shall aim at maximum material & energy recovery.

Thereafter, considering the urgency of the matter and the deadline to be met before the Honb'le NGT, Shri Martins enlisted the specific points for discussion & decision by the HLTF which are as follows:

1. **The State Government should file an Affidavit before the Hon'ble NGT, indicating the following:**
 - That the State Government has examined the Punjab Plan and the CPCB Guidelines vis-à-vis the actual conditions in the State w.r.t size, demography, administrative structure, quantum of waste generation, tourism activities, etc.
 - **The Present Status of Solid Waste Management in State**

7409

- That the State is in the process of setting up of two solid waste management facilities in the State
 - That the Detailed Master Plan for the State of Goa, integrating the existing facilities and the two plants, shall be prepared by GSIDC (which is the executing agency for the two plants) in consultation with Departments of Urban Development & Dept. of Tourism, Directorate of Panchayats, Solid Waste Management Cell and other stakeholders.
 - That there is no district or village in the State which collects MSW in its entirety as per the Goa State Pollution Control Board, and where such MSW segregated and disposed as per the MSW 2000 Rules. However, 176 out of 190 V.P.s, 12 out of 13 M.C.s and 1 Corporation have made efforts for collection, and are segregating and handing over non-biodegradable waste for co-processing to some extent. However, there is substantial scope for improvement. The organic component of waste is composted through different methods as applicable.
 - That the major points included in the Action Plan approved in the 7th HLTF held on 22.01.2015, wherein Status of SWM in the State was outlined may be included in the said Affidavit
2. The Master Plan for Solid Waste Management for the State to be prepared by GSIDC within a period of Six Months

7410

The HLTF resolved that the Affidavit to this effect including the above points may be filed by the State Government before the Hon'ble NGT. As directed in the Order of the Hon'ble NGT dated 05.02.2015, the Goa State Pollution Control Board (GSPCB) is also supposed to submit a Report and its suggestions w.r.t the Punjab Plan and the CPCB Guidelines before the Hon'ble NGT, including the Status of SWM in the State. The HLTF resolved that the GSPCB may file an Affidavit to this effect before the Hon'ble NGT on similar lines as that of the State Government, including the present status of SWM in the State.

A round of discussions followed and the decisions have been summarized in the following paragraphs:

The Principal Secretary (Industries, Science & Technology) expressed that the Master Plan for Solid Waste Management to be prepared should consider all levels from the Panchayat/Municipal Council to the State level. He opined that handling of waste should be appropriate right at village level/ Municipal Council to ensure efficient overall functioning of the waste management facility. The overall structure of the SWM system would generically be as follows: The local authority (Village Panchayat/ Municipal Council, etc.) should arrange for a collection within its jurisdiction, and such collected waste shall be transported in small vehicles as required to the Transfer Station. Thereafter, based on the quantum of waste collected, the waste from the Transfer Station shall be

7411

transported in larger vehicles to the Solid Waste Management Facility, wherein the dry and wet waste fractions would be appropriately processed.

He also mentioned that safe disposal Construction & Demolition (C&D) waste is an issue which needs to be addressed in the State. He informed that a proposal has been discussed with the Town & Country Planning Department. Several new roads are being planned/constructed in the State and in many cases, it is required to provide an embankment for proper alignment of the road. In such cases, C&D waste could be used to provide the embankment thereby ensuring safe reuse of such waste. C&D waste, if deposited in a supervised manner, can be disposed safely this way.

The Hon'ble Deputy Chief Minister & Minister for Urban Development expressed that the transportation of baled waste to neighbouring States is an expensive exercise and alternatives for the same need to be found. In this respect, the Goa State Urban Development Agency (GSUDA) is in the process of setting up a Plastic-to-Fuel plant in Pernem taluka to process the plastic component of the waste. This shall help in processing the plastic waste in-house and thereby save considerable transportation costs.

In this respect, Shri Martins explained that the segregation & baling exercise in the State has improved and has been supported by the baling machine and Fork Lift provided by M/s Sesa Goa through CSR funds. Due to this improvement, the average amount of baled waste transported per trip had increased considerably,

7/12

from the previous transportation of around 3-4 tons/trip to around 9-10 tons/trip thereby resulting in considerable savings in transport cost per ton of waste. It was informed that so far, 2570.09 tons of dry waste has been transported to M/s Vasavadatta Cement for co-processing. It was however agreed that the State still has to bear considerable cost of Rs 20,000/- per trip for transportation of baled waste.

It was discussed that for efficient design and implementation of the waste management system, proper planning is essential and that the Master Plan should be prepared at the earliest. When enquired if the GSIDC would be in a position to prepare the Master Plan, the MD, GSIDC & Commissioner, CCP expressed that a Government Decision shall have to be taken to this effect, entrusting this task to the GSIDC. He mentioned that a Questionnaire for collection of quantitative data on waste management had been forwarded to the SWM Cell, for getting it filled up from Panchayats, Councils and other Organizations in the State. However, only limited data has been obtained till date basically because of the lack of availability of quantitative data. He expressed that quantification of data on solid waste management is a big challenge and even the 400-450 TPD of waste quoted to be generated in the State is an assumption which may not be correct owing to the fact that there are several bulk generators in the State. He mentioned that if a Government decision is taken to this effect, teams shall be sent to various village panchayats, municipal councils and other organizations in the State for collection of quantitative data. As a rough estimate, the GSIDC is of

7413

the opinion that three facilities set up in the State at Calangute/Saligao, Cacora and Bainguinim shall be sufficient to cater to the State's waste.

After an enquiry about the status of the proposed SWMF at Bainguinim, it was briefed that the funding for the said project had been suspended since the project falls into the category of Transition phase projects under the JnNURM Scheme of the Government of India.

On this background, the Hon'ble Chief Minister of the State enquired how the need of the proposed SWMF at Bainguinim is justified. The HLTF deliberated that the plants at Calangute/Saligao and Cacora are to be supplied with 100 Tons of Municipal Solid Waste per day and it was cautioned that the Master Plan for Solid Waste Management to be prepared should consider this aspect.

Principal Secretary (Industries, S&T) expressed that it is necessary to understand how the internal collection mechanism within the Panchayat/Municipal Council functions and if Ragpickers/ Self-help Groups are involved in this. MD GSIDC in this matter expressed that the ragpicker network mainly collects waste which fetches value in the recycling market and is not concerned about the other non-recyclable waste, thereby making efficient collection of the entire waste difficult. The HLTF resolved that Self Help Groups and NGOs should be roped in for collection of waste within Panchayats/ Municipal Councils, etc.

7414

With regards to the preparation of the Action Plan for Solid Waste Management for the State, the Chief Secretary expressed that since local context, geography, demography, quantum of waste generation, etc. vary, Village Panchayats and Municipal Councils in the State should have their own vision documents/ Plans which should then be accepted by the Government for integrating into the State's overall Master Plan. He also mentioned that a formal consultation to this effect needs to be organized between DSTE, GSIDC, DoP, DMA, Tourism Department, Education Department, Forest Department, GIDC and other stake-holders for ensuring compliance, through appropriate Directions from the Government.

After deliberations, the High Level Task Force resolved that the Master Plan preparation should be co-ordinated by the Department of Science & Technology with inputs of all concerned and the GSIDC participating in the process only.

Principal Secretary (Environment, Urban Development & Revenue) & Hon'ble Minister for Environment & Forest stressed that the collection of segregated waste from the doorstep forms a crucial component of the SWM system.

The issue of transporting the solid waste from all the areas in the State to the new plants needs to be gone into in detail and all arrangements discussed and decided well in time.

7415

A discussion about different aspects of the Master Plan for Solid Waste Management continued. The meeting concurred that in any case, segregation and segregated collection of waste at the doorstep were mandatory components of the waste management system.

It was discussed that the Master Plan should contain an assessment of the present situation of the waste management system and infrastructure and a methodology for filling up the gaps in the system. The details of transfer stations should also be included in the Plan. The Master plan should address the Human, Economic and Physical Infrastructural aspects of solid waste management. It was discussed that it was important to educate the local representatives and Government Departments like DoP, DMA, etc. w.r.t basics of waste management & roles & responsibilities of each besides creation of awareness to students through schools, colleges, etc.

TABLE ITEM NO. 1: Proposal by M/s Eco-Reco regarding E-waste management

The Member Convenor of HLTF outlined that as discussed and approved in the 7th Meeting of the HLTF held on 22.01.2015, M/s Eco Reco had submitted a proposal for management of E-waste in the State on a pilot basis for a period of six months. This proposal, including the financial implications of disposal of E&E waste including lamps was put up before the High Level Task Force in this Meeting, which is as follows:

Responsibilities of the State Govt.:

7416

- Inventory of e-Waste generated by government departments within State of Goa
- Provision of enclosed warehouse admeasuring 5000 sq.ft
- Collection of materials from various locations and delivery to the warehouse
- Provision of electrical connection
- Aid in granting Consent to Establish & Operate for E-waste dismantling facility
- Introduction to local security agency
- Delivery of minimum 5 metric tons/month at the warehouse

Responsibilities of M/s EcoReco:

- Payment of Warehouse Security Charges, Electrical Expenses
- Payment of value for E-waste as outlined below (VAT as applicable):

Sr. No.	Material Intake per Month (T)	Charges proposed
A.	<u>For E-waste (Other than Lamps)</u>	
1	<= 5MT	Rs 10 per kg
2	> 5 MT and < 10 MT	Rs 12.50 per kg
3	> 10 MT	Rs 15 per kg
*	If the material collection is less than 5 MT in any of the months, State Govt. to compensate for the loss in minimum collection	

Sr. No.	Material Intake per Month (T)	Charges proposed
B.	<u>For Lamps</u>	
1.	Minimum Quantity 5000 lamps	Rs 10/ Unit

7412

- a) If the minimum quantity of lamps attained, Ecoreco to depute its Mobile Lamp Destruction van to the location where lamps are collected (within State of Goa limits) at no extra charge.
- b) If the minimum number of lamps is less,
- Then State Govt. can either have the lamps delivered to the Central Warehouse at their cost and Ecoreco will charge the same amount as mentioned above
 - If State Govt. still wants Ecoreco to depute the mobile van, then Ecoreco to additionally charge the transportation/logistic cost
- c) If the total number of Lamps compacted / year exceeds 3,00,000 units, Ecoreco to additionally compact 25,000 units at no extra cost or charges but minimum quantity of 5000 remains in place

The HLTF agreed that a project on a pilot basis for a period of six months could be initiated with M/s Eco Reco, only in case there is no liability clause on the minimum quantum of E-waste collected. The HLTF resolved that the Government cannot guarantee the minimum quantum of 5 MT per month of E Waste as mentioned in the proposal since this is a pilot project.

In addition, the Agency for continuation of the said work after the pilot period shall have to be selected through a tendering process. It was resolved that M/s Bavish, who is presently responsible for collection of non-biodegradable waste from various locations across the State should also be entrusted with the task of collection of E&E waste on a pilot basis and the collected waste should be transported to the material recovery facility set up at Cacora Industrial Estate.

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In order to ensure safe and scientific disposal of E&E waste in Government and other offices, the HLTF resolved that all Government Departments/ State & Central Government bodies may be directed to hand over their E&E waste to the Solid Waste Management Cell for further scientific disposal through M/s Eco Reco. It was also approved that the Certificate of Receipt issued in this respect, for items handed over for scientific disposal may be treated as a write-off on the Asset Register of the respective Departments.

TABLE ITEM NO. 2: Taking over the Second Godown of the Civil Supplies Department at Carapur-Sarvona

The Member Secretary HLTF appraised the members regarding the collection, segregation and baling activity for non-biodegradable waste going on in the State presently. Shri Martins mentioned that as on date, 176 out of the 190 Village Panchayats, 12 Municipal Councils out of 13 (other than Margao M.C.) and several other Organizations have joined this initiative and are handing over non-biodegradable waste to the Contractor appointed by the Monitoring-cum-Working Committee. This number is expected to increase with the passage of time. The waste collected is presently transported to, segregated and baled at the baling station set up in the Civil Supplies Godown at Carapur-Sarvona. With the quantum of waste increasing day by day, it was explained that additional space be arranged in order to continue the segregation & baling activity without hindrance. Shri Martins, supporting the facts with photographs, mentioned that

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there is a second godown owned by the Civil Supplies Department adjacent to the one presently hosting the baling station. After due discussions, the HLTF in principle approved that this second godown be handed over to the Monitoring-cum-Working Committee to extend the segregation & baling activity. However, appropriate approvals would have to be sought from the Government.

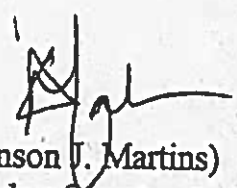
TABLE ITEM NO.3: Setting up of Biomedical Waste Treatment & Disposal Facility within the State of Goa

The Chief Secretary brought up the issue of setting up of a Biomedical Waste Treatment & Disposal Facility in the State of Goa. Since setting up of such a facility within the State is a need of the hour, the HLTF decided that this task should be taken up on priority and expedited. With regards to the selection of site, it was proposed that either an area of around 4000 m² should be demarcated within the site identified at Dharbandora for setting up of a Hazardous Waste Treatment Facility or a site be allocated within the Industrial Estates in Ponda Taluka. Since the site selection for setting up of the biomedical waste treatment facility has to be done as per stringent conditions including absence of any habitation within a 10 km radius, and owing to the non-availability of land in Goa, the HLTF resolved that it would be advisable to set up such a facility in an Industrial Estate/Area. Further, in order to cut down on costs and time involved in transportation, the HLTF resolved that it would be advisable to explore the option of setting up the said facility in an Industrial Area/Estate in the centrally located Ponda Taluka.

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The HLTF resolved that an application be moved to the GIDC seeking such a plot in one of the Industrial Estates in Ponda by the DSTE on priority and thereafter call upon an Expression of Interest for setting up of the Common Biomedical Waste Treatment Facility (CBWTF).

The meeting ended with thanks to the Chair.



(Levinson J. Martins)
Member Secretary,
Goa State Pollution Control Board &
Member Convener, HLTF for Solid
Waste Management, Government of Goa

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Attendance of the 8th Meeting of the High Level Task Force held on
25.02.2015 at 03:30 pm in the Ministerial Block, Secretariat, Porvorim, Goa

1. Shri. Laxmikant Parsekar, Hon'ble Chief Minister and Chairman (HLTF)
2. Smt. Alina Saldhana, Hon'ble Minister for Environment & Forest
3. Shri. Francis Dsouza, Hon'ble Deputy Chief Minister & Minister for Urban Development
4. Shri. Dayanand Mandrekar, Hon'ble Minister for Panchayats
5. Shri. Kewal K. Sharma (IAS), Chief Secretary, Government of Goa
6. Shri. P. Mathew Samuel (IAS), Principal Secretary (Panchayati Raj)
7. Shri. R.K. Srivastava (IAS), Principal Secretary (Environment, Urban Development, and Revenue)
8. Shri. Parimal Rai (IAS), Principal Secretary (Industries, Science & Technology)
9. Smt. Nila Mohanan (IAS), Collector (North Goa)
10. Shri. Sachin Shinde (IAS), Collector (South Goa)
11. Shri. Ameya Abhyankar (IAS), Director, Department of Tourism and Addl. Secretary (Finance)
12. Shri. Srinet Kothawale, Director, Department of Environment
13. Shri. Michael D'Souza, Additional Secretary (Finance)
14. Shri. K.D. Halankar, Directorate of Panchayats
15. Shri. S.G. Korgaonkar, Commissioner, Department of Commercial Taxes
16. Shri. Venancio Furtado, Director of Municipal Administration
17. Shri. Sanjeev Dalvi, Director, Directorate of Health Services
18. Shri. Lawrence D'Souza (DYSP), Representative, SP (South)
19. Shri. Nelson Albuquerque, Representative for S.P. (North)
20. Shri. Jose Manuel Noronha, Chairman, Goa State Pollution Control Board

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21. Shri S.T Puttaraju, Chief Town Planner, Town and Country Planning Department
22. Shri. S.V. Naik, Directorate of Industries, Trade and Commerce
23. Shri. Dattaprasad J.S. Borkar, Public Works Department
24. Shri D.N.F. Carvalho, Representative for Forest Department
25. Shri. Kiran Kumar, Regional Manager, Goa Industrial Development Corporation
26. Shri. Levinson J. Martins, Member Secretary (GSPCB) & Member Convener (HLTF)

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**Integrated Solid Waste Management
Status and Roadmap Document for the
State of Goa**

Government of Goa



February 2015

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Integrated Solid Waste Management Status and Roadmap Document for the State of Goa

1. Preamble

Directions of the National Green Tribunal

The National Green Tribunal in its directions on the 15.01.2015 had directed the State governments to submit a detailed action plan in accordance to the judgement of Capt. Mall Singh and Ors. Vs Punjab PCB and Ors. Appeal No. 70 of 2012. The action plan submitted by the Department of Environment on behalf of the State Government was also on the similar lines as that of the Punjab Plan. However in its directions on 05.02.2015 the Principal Bench of the National Green Tribunal further directed the States to resubmit the plans referring to the guidelines to be set out by the Central Pollution Control Board.

Guidelines of the Central Pollution Control Board

After studying the Punjab Plan and also the Guidelines given by the Central Pollution Control Board it has been discussed and agreed by the State that the modalities and the region, location, demographic specific aspects of solid waste management in the State of Goa are different from those outlined in the CPCB Action plan and cannot be directly applied in the context of the State.

However the Relevance/Status/Action Points in the context of Goa w.r.t each point of the CPCB guidelines is given in the following table:

Guidelines	Relevance/Status/Action point with respect to Goa
a. State Level Action Plan and City Level Action Plan.—The State plan would provide advice to local bodies and finalize modalities for setting up individual or combined waste processing and disposal facilities on a	1. Since Goa is a small state and since all the Municipal Councils are partially compliant with the MSW Rules 2000, the Dept. of Science & Technology in coordination with the GSIDC, Directorate of Panchayats, Department of Urban Development, Goa Industrial

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<p>cluster based approach. Each Municipal body should prepare an action plan after assessing the waste generation and its composition. Local body should work out requirement of tools and equipment to ensure proper segregation, storage, transportation, processing and disposal of waste.</p>	<p>Development Corporation, Tourism Department, Education Department, will prepare a State level Detailed Project Report/Action Plan which will cover various aspects of Solid Waste Management in the State of Goa.</p> <p>2. The Village Panchayats & Municipal Councils shall have their own vision documents/Plans which shall be accepted by the Government and integrated into the State's overall Master Plan.</p>
<p>b. Towns generating waste ranging from 100-500 tons per day would be required to prepare action plan for improving collection system, storage, transportation, processing and disposal of waste. Towns generating waste less than 100 tons per day may not require high cost waste processing and disposal technologies. These can be a member of the cluster/regional approach.</p>	<p>1. The quantum of waste generation of the entire State is estimated to be around 400-450 TPD and there are no large cities in the State.</p> <p>2. This would be taken into account while preparation of the State level Detailed Project Report/Action Plan</p>
<p>c. Detailed Project Report to be prepared in accordance to MSW Rules to cover segregation, collection, storage, transportation, processing and disposal in a time frame of six months.</p>	<p>The Department of Science & Technology in coordination with the GSIDC, Directorate of Panchayats, Department of Urban Development, Goa Industrial Development Corporation, Tourism Department, Education Department, will prepare a State level Detailed Project Report/Action Plan which will cover various aspects of Solid Waste Management in the State of Goa in a period of six months.</p>
<p>d. Each Local Body shall undertake assessment of quantity of MSW Generation and its composition before identification of processing technology</p>	<p>This will be taken into account in the State level Detailed Project Report/Action Plan</p>

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<p>for MSW Management within a timeframe of six to twelve months.</p>	
<p>e. Arrangements to be made for collection of waste from door to door, slums, commercial areas, industrial areas, horticultural waste from parks, construction and demolition waste, office complexes, slaughterhouses and vegetable markets in a time frame of nine months.</p>	<ol style="list-style-type: none">1. As of now dry non- biodegradable waste is being collected by 176 Village Panchayats out of 190, 12 Municipal Councils out of 13 and one Corporation and the same is handed over to the Contractor appointed by the Government.2. This collection of dry waste is also done from School Complexes, Industrial Estates, Defence Establishments, NGO's and Central and State Government Departments and Offices.3. Circulars have been issued by the Directorate of Panchayats and Municipal Administration providing guidelines to M.C.s and V.P.s to undertake door-to-door collection of dry waste.4. Highway cleaning has been undertaken by the GSIDC5. Tourism Department has given a contract for cleaning of the beaches
<p>f. Awareness programs to be made for segregation of waste at school level, residential area level, market and commercial areas through different channels like pamphlets, interaction, hoardings, cable networks, newspapers etc. in a time frame of six months.</p>	<ol style="list-style-type: none">1. This awareness activity is already being carried out across the state of Goa through the Print, Audio and Visual Media and also through collections from Schools Complexes, Industrial Estates, Defence Establishments, NGO's and other Central and State Government Departments and Offices.2. In addition, the State is also undertaking interactions & meetings with local representatives to explain the importance and details of segregation of waste at source

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	<p>3. Training programs for 94 Schools in Goa had been undertaken and a set of four bins has been given to these Schools to reinforce the principles of segregation.</p> <p>4. In addition, awareness campaigns are also being undertaken in some Municipalities/Panchayats.</p> <p>5. The VP/MCs who joined the initiative of collection of dry waste were felicitated on World Environment Day for spreading awareness and encouraging other local bodies to take up their responsibilities regarding SWM.</p>
<p>g. Framework for regulation of stray cattle movement, prohibiting burning of waste, Regular Street sweeping by manual or mechanical means based on roads, covering dusty areas, setting up of complaint cell and attending to complaints on urgent basis, constitution of vigilance squads, within a time frame of six months.</p>	<p>1. This would be taken into account while preparing the State level Detailed Project Report/Action Plan</p> <p>2. Currently there are Garbage Committees in some Municipal Councils and Village Panchayats which have clear defined roles in Goa Non- Biodegradable Garbage Control Act 1996.</p>
<p>h. Setting up of bins, containers for storage of Construction and Demolition waste, regular operation and maintenance of waste storage facilities, open sites to be eliminated in a time frame of nine months.</p>	<p>This would be taken into account while preparing the State level Detailed Project Report/Action Plan</p>
<p>i. Procuring of Transport Vehicles as per DPR and devising transportation system, workshop facilities for Operation and Maintenance of the fleet in a time frame of eighteen months.</p>	<p>Few MCs already have infrastructure like trucks, tippers, trolley bins, etc. for transport of waste.</p> <p>This would be taken into account while preparing the State level Detailed Project Report/Action Plan</p>

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<p>j. Formulation of State level plan for setting up processing facilities, drafting terms for seeking private entrepreneurship to setup facilities, constitution of a State Level Technology Advisory Group to assist local bodies in evaluation of tenders, selection of technologies, inviting tenders, site selection in a time frame of eighteen months.</p>	<p>The details on the technology and all the processes that were followed is explained in the Background and Status Report at point number 2 below.</p>
<p>k. Taking possession of disposal sites and inviting construction tenders for disposal facilities within a time frame of thirty six months.</p>	
<p>l. Rehabilitation and clearing of old dumpsites within a timeframe of eighteen months.</p>	<p>This would be taken into account while preparing the State level Detailed Project Report/Action Plan. The proposed facilities at Calangute/Saligao and Cacora are planned on dump sites and are envisaged to treat the existing waste dumped at site</p>
<p>m. Introduction, Objectives/Scope of the DPR, profile of the City, present practices of MSWM in the city, proposed action plan for MSWM in the city. Proposed Action Plan should include storage of waste at source, segregation of non-biodegradable, recyclable waste, primary collection of waste, sweeping of streets and public places, provision of litterbins, temporary waste storage depots, transportation of waste, waste processing and disposal, funds for</p>	<p>This would be taken into account while preparing the State level Detailed Project Report/Action Plan</p>

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setting up of facilities, estimation of sanitation workers, drivers needed.	
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State Specific Observations:

1. The proposed Solid Waste Management Facilities at Calangute/Saligao, Cacora shall follow the Cluster Approach as outlined in the CPCB Guidelines and shall cater to designated areas around them. The proposal for setting up another facility at Bainguinim is also under consideration.
2. Based on the performance of these Solid Waste Processing and Treatment Facilities and the existing Solid waste management infrastructure in the State, a decision on whether more such facilities are needed would be taken by the State Government.
3. A Status of each of the Municipal Councils and the Corporation of the City of Panaji with regards to Municipal Solid Waste Management has been prepared by the Goa State Pollution Control Board which indicates that there is no district or Municipal Council/Corporation or village in the State which collects MSW in its entirety and where such MSW segregated and disposed as per the MSW 2000 Rules.
4. However, 176 out of 190 V.P.s, 12 out of 13 M.C.s and 1 Corporation have made efforts for collection, and are segregating and handing over non-biodegradable waste for co-processing to some extent. In spite of this, there is substantial scope for improvement. The organic component of waste is composted through different methods in the Municipal Councils as applicable.
5. The Monitoring-cum-Working Committee for Solid Waste Management has entered into an Agreement with a cement company, wherein the baled waste transported to the company shall be processed scientifically through co-processing.

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6. A State level Detailed Project Report/Action Plan which will include various aspects of Municipal Solid Waste Management shall be prepared in a period of six months from the day of submission of this Plan.
7. The State Government aims at adopting methods for disposal of MSW which ensure maximum material & energy recovery and minimal landfilling.

2. Background and Status Report

Demography and Administrative Structure

The State of Goa has a population of 14.5 lakhs and a floating tourist population of around 25 lakhs per year. The State has one Municipal Corporation, 13 Municipal Councils and 190 Village Panchayats. The State comprises of two districts North Goa and South Goa and twelve talukas.

The State of Goa has also notified the Goa Non- Biodegradable Garbage (Control) Act 1996, Rules 1997 and a Rural Garbage Disposal Scheme as amended in 2007 for management of Solid Waste in the State of Goa.

It is estimated that approximately 400 to 450 Tonnes per day of garbage is generated in the state of Goa.

Directions by the Hon'ble High Court

The Hon'ble High Court of Bombay at Goa took Suo Motu cognizance of the Management of Solid Waste in the State of Goa and gave Directions to the State Government, Municipal Councils and the Village Panchayats in Suo Motu Writ Petition 2 of 2007, vide Order dated 13th Aug 2013. The directions to the concerned Village Panchayats include collection of plastic waste from all wards, baling of the collected waste and transport of the baled waste to the site selected by the State Government. Directions were also given to set up adequate composting facilities for disposal of biodegradable waste in few Village Panchayats. The directions also included the clause that construction licenses

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could not be issued by few Village Panchayats unless the GSPCB certified that collection and baling of plastic waste was being done satisfactorily. Municipal Councils were given directions to set up landfill sites and adequate composting facilities as applicable.

The following Municipal Councils have established treatment Plant and landfill sites.

- a. Bicholim
- b. Canacona
- c. Quepem
- d. Sanquelim
- e. Cuncolim
- f. Pernem.

The following Municipal Councils have established treatment facilities but do not have landfill sites

- a. Margao
- b. Mormugao

The Corporation of the City of Panaji has decentralized waste treatment facilities but no landfill site. It was decided that the Municipal councils having their own treatment facilities will continue treat their waste in the facility and continue to dispose the residual waste in the existing landfill. Those Municipal Councils that do not have a landfill site will acquire the land and establish a landfill site by December 2016.

Institutional set-up for Solid Waste Management

As submitted before the Hon'ble High Court, the State of Goa has constituted the following bodies for dealing with various matters pertaining to SWM:

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1. A High Level Task Force under the Chairmanship of Hon'ble Chief Minister of Goa to take decisions pertaining to setting up of solid waste management facilities in the State.
2. A Monitoring-Cum-Working Committee (McWC) on Solid Waste Management under the Chairmanship of the Hon'ble Minister of Environment and Forests to implement provisions of various Acts and Rules pertaining to SWM.
3. A Solid Waste Management Cell under the Department of Science and Technology to provide secretarial assistance to the Monitoring cum Working Committee and to perform tasks pertaining to setting up of the Solid Waste Management facilities in the State.

The Cabinet of the Council of Ministers has also decided that the policy decisions pertaining to Solid Waste Management will be taken by the Department of Science and Technology.

Setting up of Solid Waste Management Facilities in the State

Background

Vide Order dated 13.08.2013 with respect to the Suo Motu Writ Petition 2/2007, the Hon'ble High Court of Bombay at Goa issued directions to the Municipal Councils/ Corporation, Village Panchayats and the State Government to take various measures to improve the solid waste management in the state of Goa.

Specific Directions issued to the State Government under Clause 27(III) of the said Order include that the State Government shall set up two or more sanitary landfills within a period of one year for accepting the residual/inert waste for Village Panchayats of North Goa and South Goa. In order to comply with the Directions of the Hon'ble High Court, the Government of Goa resolved to

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establish two Solid Waste Management Facilities, at Calangute/ Saligao in North Goa and at Cacora in South Goa.

Technology Selection

Owing to the fact that land filling is the last option that the State should resort to for management & disposal of municipal solid waste, the proposed facilities are based on Recycle & Sorting Line, Segregation, Bio-methanation and In-vessel Composting. The facilities shall aim at maximum material and energy recovery; and only the inert component of the waste shall be disposed in the sanitary landfills which are designed to be a part of the proposed facilities. Bio-methanation & in-vessel composting to be employed in the proposed facilities are approved technologies as per the CPCB Manual on Municipal Solid Waste Processing Technologies.

The technology selected for the projects has been approved by M/s NEERI, Nagpur. The Request for Proposal received from bidders were scrutinized by the Expert Committee constituted for technical evaluation of the bids. The Committee comprised experts, scientists from M/s NEERI, Environmental Engineer & Directors from Department of Science, Technology & Environment, Professor of Environment from BITS Pilani, Faculty from IIT Bombay and was headed by Dr. Sharad Kale, Professor at the Dr. Homi Bhabha Atomic Research Centre, Mumbai.

Institutional set-up

As per the Cabinet Decision of the Council of Ministers in its XXXXIVth Meeting held on 14.08.2013, the Department of Science and Technology is designated to be the Nodal Agency for the projects, and the Goa State Infrastructure Development Corporation (GSIDC) is the executing agency for the projects.

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Site selection

Site selection has been completed with both the selected sites being existing solid waste dump sites for the Calangute Panchayat and the Cacora-Curchorem Municipal Council respectively for more than 10 years. The sites comply with the selection criteria for setting up sanitary landfills as per the MSW 2000 Rules.

These SWM facilities are on the same lines as the Integrated Solid Waste Management Facilities in the Punjab plan as these are also proposed on degraded sites used for unscientific dumping of solid waste and are also proposed to generate electricity. Both the Sites are identified as Garbage Management Sites (GMS) in the Regional Plan 2021 after due consultations.

The selected sites are degraded due to unscientific dumping of waste for past several years & require to be remediated to prohibit further harm to the environment.

Land Acquisition for the proposed facilities

Land Acquisition (LA) for both the sites has been undertaken with respect to the applicable Acts and Rules. Acquisition for the facility at Calangute/Saligao admeasuring a total of 1,21,580 m² (1,13,500 m² from Calangute Village and 8,080 m² from Saligao Village) and for the facility at Cacora admeasuring a total of 82,750 m² (64,985 m² land acquired by the Cacora Curchorem M.C. and 17,765 m² from private owners) in Cacora village has been completed. The Land has been acquired along with payment of the corresponding LA compensation amounts outlined in the Award issued by the respective Land Acquisition Officers.

It was resolved that the acquired Land shall follow the change of possession as below:

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- Transfer to Department of Science, Technology & Environment which is the Nodal Agency for the projects
- Handing over to the Goa Industrial Development Corporation (GIDC) from DSTE. Declaration of the acquired land as Notified Industrial Area following due procedures.
- Transfer to the Goa State Infrastructure Development Corporation (GSIDC) from GIDC for project implementation

Completion of EIA Studies for the Plants

The DSTE, which is the Project Proponent, applied for Terms of Reference (TORs) for carrying out EIA studies for the plants. Accordingly, the Goa State Expert Appraisal Committee (G-SEAC) issued TORs for carrying out Rapid EIA studies and M/s NEERI, Nagpur was entrusted with the task of carrying out the Rapid EIA studies to be carried out in the post-monsoon season. A preliminary Status Report submitted by M/s NEERI, Nagpur states the following

- Since the site and the surrounding environment is degraded due to continual unscientific disposal of MSW, CMSWMF is essential for restoration of environmental quality and should be established at the earliest. The necessary consents for the establishment of CMSWMF may be issued at this stage considering the scientific and environmentally sound management practices proposed to be adopted and envisaged environmental benefits. However, the EMP that would be delineated by NEERI in due course of time after Rapid EIA Studies should be suitably incorporated in CMSWMF.
- In order to minimize/eliminate the adverse environmental impacts, existing MSW lying at the site should be processed on priority basis after the commissioning of CMSWMF.
- The TOR clauses mentioned in Section 7.0 of the preliminary report should be exempted by SEAC.

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On this background, owing to the degraded nature of the site, associated harmful environmental effects in case remediation measures were not taken up urgently and the fact that the proposed facilities were bound to create a positive impact on the environment, the PP applied for grant of prior Environmental Clearance for the facilities in order to commence with the activities on ground and to comply with the deadline of one year set out by the Hon'ble High Court in Suo Motu W.P. 2/2007. The G-SEIAA considering the recommendations of the G-SEAC granted prior Environmental Clearance for the said facilities, with certain conditions including a Specific Condition that the Environmental Clearance would be granted only on submission of the Rapid Site-specific EIA Report by M/s NEERI.

Thereafter, M/s NEERI has submitted a Rapid EIA Report for the said facilities, which includes data, monitoring, analysis and points in compliance with the Terms of Reference (TORs) and the same was submitted to the G-SEAC for presenting additional post EC monitoring compliance by the PP. The G-SEAC and G-SEIAA are in the process of appraising the said EIA Report in light of the above.

The Government has shortlisted the Concessionaire for setting up the facilities. It is expected that the plants will be commissioned and put in operation by Dec 2015. The Construction for the proposed Solid Waste Management Facility at Calangute has started on ground.

The SWMF at Cacora in South Goa shall cater to the Talukas of Quepem, Canacona, Dharbandora and Sanguem whereas the facility at Calangute/Saligao in North Goa shall cater to the Coastal and other villages of Bardez Taluka including Calangute, Saligao, Pilerne, Parra, Candolim, Baga Belt, Anjuna, Arpora, etc. A similar Greenfield Solid Waste Management Facility is also proposed at Bainguinim (Tiswadi). However in addition, the concerned

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Municipal Councils will setup their own sanitary landfill sites for disposal of inert/residual waste/debris etc.

Collection mechanism for non-biodegradable waste

Meanwhile, the State Government through Monitoring cum Working Committee (McWC) has taken up the initiative of collection non-biodegradable dry/plastic waste from various Village Panchayats, Municipal Councils, Schools, Industrial Estates, and Defence Establishments, etc. across the State. The McWC has entered into a Memorandum of Understanding with M/s Vasavadatta Cement for disposal of non-biodegradable combustible waste through co-processing in the cement kilns.

The waste collected from various locations across Goa by the Contractor appointed by the McWC is transported to the Segregation and Baling Stations set up by the Committee. The segregated Non-Biodegradable Waste reaching the baling stations is baled and transported to M/s Vasavadatta Cement for co-processing.

A total of 2251.12 tons of baled waste (1536.88 Tons of waste has been baled and transported from CCP since (23rd December 2011 till date) and 1033.21 Tons from Cacora and Sarvona Baling stations (from 29th October 2013 till date)) for Co-processing.

One Municipal Corporation, 12 Municipal Councils out of 13 and 176 Village Panchayats out of 190 are currently handing over Non-Biodegradable dry waste for the above process.

Legal Provisions

Goa Non-Biodegradable Garbage Control Act 1996

The State Govt. has enacted the Goa Non-Biodegradable Garbage Control Act 1996 and Rules 1997 which deals with especially the Non-biodegradable

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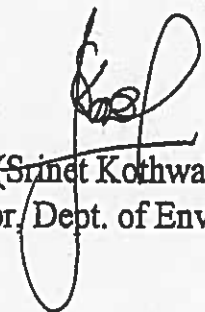
component of waste. In the said Act and Rules, littering is considered as an offence and the authorities have been empowered to levy fines by way of issue of Notifications under the provisions of the said Act.

The Government has recently enacted the Second and Third Amendments to the Act by which the State government levies a two percent cess on all products marketed in non-biodegradable packaging material and has also made it mandatory for all owners and occupiers to segregate biodegradable and non-biodegradable waste at source respectively.

The Third Amendment to the Act outlines the fines to be imposed for contravention of different provisions of the Act.

Regulatory measures

- o Littering and Non-segregation at the point of generation are contraventions of the Goa Non-biodegradable Garbage (Control) Act 1996, Rules 1997 and the Amendments thereof.
- o The household hazardous waste should be collected separately through monthly collection drives
- o As per Clause 5 of the Goa Non-Biodegradable Garbage (Control) Act and Amendments, the duty of owner and occupier to collect, segregate and store non-biodegradable garbage etc. It shall be the duty of the owner and occupier to collect and segregate the non-biodegradable garbage generated within their place and store securely until it is handed over to the local authority.


(Srinet Kothwale)
Director, Dept. of Environment



Government of Goa
Department of Science, Technology & Environment
Opp. Saligao Seminary, Saligao, Bardez - Goa. 403511
Phone nos. 0832-2407189, 2407187, 2407580 Fax no. 0832-2407176
e-mail: dir-ste.goa@nic.in

No: 3 - 209 - 2012 / STE - DIR / 592

Date: 08th November, 2012

ORDER

Government of Goa is pleased to constitute a High Level Task Force (HLTF) to provide directions and implement various measures as announced in the Budget Speech, 2012-13, towards resolving the solid waste management problems affecting the State of Goa.

2. The HLTF shall comprise of:
- | | | | |
|-------|---|----|-----------------|
| i. | Hon'ble Chief Minister | -- | Chairman |
| ii. | Hon'ble Dy. Chief Minister / Minister for Urban Development | -- | Vice Chairman |
| iii. | Hon'ble Minister for Panchayats | -- | Member |
| iv. | Hon'ble Minister for Environment | -- | Member |
| v. | Chief Secretary | -- | Member |
| vi. | Chairman, Goa State Pollution Control Board (GSPCB) | -- | Member |
| vii. | Principal Secretary (Environment) | -- | Member |
| viii. | Principal Secretary (Urban Development) | -- | Member |
| ix. | Secretary (Panchayati Raj) | -- | Member |
| x. | Commissioner, City Corporation of Panaji | -- | Member |
| xi. | Member Secretary (GSPCB) | -- | Member Convener |

All the Heads of Department in the Departments of Public Works, Forests, Environment, Tourism, Health, Municipal Administration / Urban Development, Panchayats, Town & Country Planning, Industries Trade & Commerce, Collectorate (North Goa), Collectorate (South Goa), Superintendent of Police (North) and Superintendent of Police (South), shall be permanent invitees to the HLTF.

3. The basic Terms of Reference (ToR) and powers to the HLTF shall be to direct and bring into force, measures to:

- handle all aspects pertaining to solid waste management problems of the State,
- decide, regulate, handle and monitor all the efforts of Urban Local Bodies (ULB's) / Panchayati Raj Institutions (PRI's) in solid waste management;

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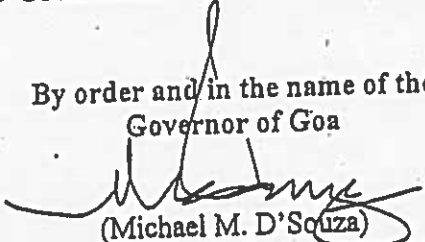
- S/C
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- c) lay down guidelines, finalize requisite technology, choose appropriate place/site/location, provide necessary benefits (fiscal as well as non-fiscal) and facilitate process of setting up garbage treatment plant(s) as per the decision to be taken by the HLTF;
 - d) provide for appropriate remedial measures and directions for sensitization and public awareness programmes and need based intervention to Institutions and ULB's / PRI's; and
 - e) provide for measures for phasing out of plastic and introduction of alternate substitute material in the State of Goa with a timeline fixed for implementation.

4. HLTF shall have full powers to take all administrative and financial decisions in respect of implementation of the points listed in the ToR and any other measures; so also provide directions in terms of the guidelines / provisions contained in the Municipal Solid Waste (Management & Handling) Rules, 2000; Plastic Waste (Management & Handling) Rules, 2011; other Waste Management and Handling Rules as defined under Environment (Protection) Act, 1986; Goa Non Biodegradable Garbage (Control) Act, 1996 and the Rules made thereunder; Rural Garbage Disposal Scheme, 2005 and Goa Panchayat (Grant of Financial Assistance to the Village Panchayats to deal with Plastic Garbage Menace) Scheme, 2007.

All the directions issued by HLTF, shall be deemed to be directions under section 5 of the Environment (Protection) Act, 1986; in exercise of the powers delegated to the Government of Goa vide Notification No. S.O. 881(E) dated 22/09/1988, issued by Ministry of Environment & Forests (MoEF), Government of India.

5. This issues with the approval of the Government vide U. O. No. 8859-F dated 07/11/2012

By order and in the name of the
Governor of Goa


(Michael M. D'Souza)
Director / ex-officio Jt. Secretary (STE)

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The Director, Department of Printing & Stationery, Government of Goa, Panaji - Goa, for publication in the Official Gazette with a request to furnish ten copies of the same to this Department on published.

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 2. O. S. D. to Hon'ble Minister for Environment, Secretariat, Alto - Porvorim - Goa for kind information.
 3. P. S. to the Chief Secretary, Govt. of Goa, Secretariat, Alto - Porvorim for kind information.
 4. P. A. to the Principal Secretary (STE), Govt. of Goa, Secretariat, Alto - Porvorim - Goa for kind information.
 5. Guard file. 6. Order file. 7. Office Copy.