

**Minutes of the meeting held in the chamber of Hon'ble Minister (LSG) on 11/12/2018 at 4.00 P.M. to discuss the measures to be adopted for the treatment of leachate generated from the waste accumulated at Brahmapuram and also for the proper functioning of the Solid Waste Management (SWM) plant at Brahmapuram of Kochi Corporation.**

The meeting started at 4.00 P.M. with Hon'ble Minister (LSG) in chair. List of participants attached.

The measures to be adopted for the treatment of leachate generated from the waste accumulated in the premises of Brahmapuram Solid Waste Management Plant of Kochi Corporation and for the proper functioning of the plant was discussed in detail. A Power Point Presentation was also made by Shri.S.Sreekumar, Environmental Expert, AMRUT Mission on the basis of the site visit conducted by the team headed by Dr.Mitra T., IAS, Additional Secretary, constituted vide G.O(Rt) No.3105/18/LSGD dated 6/12/2018.

The Municipal Solid Waste from 21 circles of Kochi Corporation and five nearby Municipalities (Aluva, Angamaly, Kalamasseri, Thrikkakara and Thrippunithura) and Solid Waste from Cheranalloor, Vadavukode-Puthencruz Grama Panchayats are regularly brought to the Plant. The design capacity of the plant is 250 tonnes per day (TPD). The average quantity of waste received in the Plant on a normal day is 383.45 TPD which includes 64% Biodegradable Waste and 36% of plastic and such other non-bio degradable waste ie; the plant is receiving waste beyond its capacity. Moreover the plant is now in a dilapidated condition. The Refuse Derived Fuel (RDF) facility, Vermi Composting Plant (50 TPD) and Plastic Shredding & Bailing Units are not functioning. No proper drainage is available to collect and channelize the leachate generated to any particular collection system. This causes the accumulation of leachate at various points and in the drains which are silted / clogged. Since the trommels and the conveyor systems are not fully functional, the segregation of waste cannot be carried out properly. Hence there is a situation of biodegradable waste going in to rejects which accumulate and generate leachate. In addition to this a huge dump of legacy non bio-degradable waste is also spread over an area of about 16 acres within in the Solid Waste Management Plant at Brahmapuram. The inefficient waste recovery at Brahmapuram leads to accumulation of dry waste. The Hon'ble National Green Tribunal has imposed a fine of Rs.1 crore on Kochi Corporation for delay in setting up of efficient Solid Waste Management mechanism. Besides the Regional Monitoring Committee (South) constituted by Hon'ble NGT for

monitoring Solid Waste Management is also decided to visit Brahmapuram plant shortly.

After detailed discussion the following decision are taken:

### **Decisions**

- (i) The following emerging measures are to be taken in the Solid Waste Management Plant at Brhmapuram before 19/12/2018, in the light of the order of Hon'ble National Green Tribunal and also considering the proposed visit of Regional Monitoring Committee (South) at the plant.
- (a) Formation of windrows.
  - (b) Drains should be cleaned.
  - (c) Collection points should be identified and provide collection Tanks / Sumps.
  - (d) Leachets to be channelized to the drains
    - Lining of external earthen drains with LDPE / HDPE sheets
    - Provide PVC pipes or gutters for the leachate streams within the plant.

**Action** :- Shri.H.Titus, Executive Engineer, Kochi Corporation.  
**Monitoring** :- C.M.Sulaiman, Superintending Engineer, Cochin Corporation.  
**Time Limit** :- 19.12.2018.
  - (e) Service providers / Agencies capable of installing Portable / Mobile Electrolytic Leachate Treatment Unit Should be engaged at the Plant for the scientific treatment of existing leachate.  
**Action** :- Secretary, Kochi Corporation.  
**Time Limit** :- One week.
- (ii) The following short term measures should be initiated in 2 to 3 months.
- (a) Kochi Corporation should take active measures to ensure proper segregated collection and treatment of waste.
  - (b) Repair of trommels (2 nos.) should be carried out urgently.
  - (c) Proper collection and drainage arrangement should be established.
    - Permanent drainage system.
    - Separate drains for storm water and leachate.
    - Temporary covers to existing drain to prevent rainwater intrusion.

**Action** :- Shri.H.Titus, Executive Engineer, Kochi Corporation.  
**Monitoring** :- C.M.Sulaiman, Superintending Engineer, Kochi Corporation.

**Time Limit :-** 15.03.2019.

- (d) Leachate treatment - Semi permanent system should be established.

**Action :-** Health Supervisor, Kochi Corporation.

**Monitoring :-** Secretary, Kochi Corporation.

**Time Limit :-** 15.03.2019

- (e) To establish fully functional plastic shredding unit with capacity addition.

**Action :-** Secretary, Kochi Corporation.

**Time Limit :-** 15.03.2019

- (f) To place an Agenda before Corporation Council for inviting competitive bids for remediation of existing legacy waste and take further action for the effective disposal of legacy waste accumulated in Brahamapuram Plant.

**Action :-** Secretary, Kochi Corporation,  
Environmental Engineer, Kohci Corporation.

**Time Limit :-** 15.03.2019

- (g) The Executive Director , Suchitwa Mission shall consult Kerala Enviro Infrastructure Lintied authorities and take further action for the disposal of flood waste accumulated at Brahamapuram.

**Action :-** Executive Director, Suchitwa Mission,  
Secretary, Kochi Corporation.

**Time Limit :-** 15.03.2019

- (iii) The following Mid term measures are to be initiated in 3-6 Months.

- (a) All activities initiated in short term to be completed in midterm.

- (b) Fully functional leachate treatment facility should be established.

**Action :-** Secretary, Kochi Corporation  
Shri.H.Titus, Executive Engineer, Kochi Corporation.  
Health Supervisor, Kochi Corporation

**Monitoring :-** Secretary, Kochi Corporation.  
C.M.Sulaiman, Superintending Engineer, Kochi Corporation.

**Time Limit :-** 3 to 6 months.

- (iv) The following Long term measures are to be taken :-
- (a) To ensure that fully segregated waste are only accepted for windrow composting.  
**Action :-** Health Supervisor, Kochi Corporation.  
**Time Limit :-** 6 months
- (b) There should be a strict monitoring mechanism for the smooth operation of the plant.  
**Action:-** A sub-committee to be appointed by the Corporation Council.  
**Time Limit :-** One month
- (c) A Sanitary Landfill for rejects should be constructed.  
**Action:-** Shri.H.Titus, Executive Engineer, Kochi Corporation.  
**Monitoring:-** Superintending Engineer,  
**Time Limit :-** One month
- (d) There should be a daily monitoring mechanism for monitoring the activities mentioned above.  
**Action:-** Team headed by Dr.Mithra T., IAS.
- (v) Kochi Corporation should take urgent steps to bring the action taken so far and future plan of action that will be implemented in the Solid Waste Management sector, to the notice of Hon'ble NGT through the Counsel appointed for the purpose  
**Action :-** Secretary, Kochi Corporation.  
**Time Limit :-** 15 days
- (vi) In order to prevent outsiders from dumping waste at Brahmapuram plant a gate should be installed. A Security Officer should also be appointed.  
**Action:-** Shri.H.Titus, Executive Engineer, Kochi Corporation.  
Secretary, Kochi Corporation.  
**Time Limit :-** One week.
- The meeting concluded at 5.30 PM.