

**PROCEEDINGS OF THE EXECUTIVE DIRECTOR, SUCHITWA MISSION,**  
**THIRUVANANTHAPURAM**

**PRESENT : U.V. Jose IAS (Retd.)**

Sub:- L.S.G.D - Suchitwa Mission- Approval of New devices – Standards, Specifications, O&M protocol and unit Cost for household level/small scale solid waste management devices - orders issued - Reg.

No: 2869/C2/2016/SM

Dated: 20.07.2024

Read:- 1. Proceedings No. 1547/C2/2021/SM dated 30.10.2021 of the Executive Director, Suchitwa Mission.  
2. Minutes of the Technical Committee Meeting held on 16.06.2022 at Suchitwa Mission.  
3. Minutes of the Technical Committee Meeting held on 02.03.2023 at Suchitwa Mission.  
4. Minutes of the Technical Committee Meeting held on 06.11.2021 at Suchitwa Mission.  
5. Minutes of the Technical Committee Meeting held on 27.09.2023 at Suchitwa Mission.  
6. Minutes of the Rate Fixation Committee held on 29.01.2024.

**ORDER**

Applications were received from various agencies for approving new devices/ technologies in the solid waste management sector. Vide paper read 1st above, a technical committee has been constituted for scrutinizing and approving the new technologies and devices in Solid Waste Management sector. Vide paper read 2nd and 3rd above, on 16.06.2022 and 02.03.2023 the technical committee verified the applications submitted by the Jetco Polymers for approval of their new device, Garden Composter. Final approval will be granted following the submission of customer satisfaction reports and field verification reports. Following the submission of the required documents, the device has been approved by the committee.

In the technical committee held on 16.06.2022 vide paper read 2nd above, the committee reviewed the application from JMP Talent Works for approval of their product, BIO-POD. It was decided that final approval would be granted upon the submission of customer satisfaction reports and field verification reports. Following the submission of the required documents, the device has been approved by the committee.

Furthermore, vide paper read 4th above, the application from KM Precast Works submitted for the approval of their device, Underground Kitchen Waste Disposal Tank, was reviewed in the technical committee meeting held on 06.11.2021. The committee recommended a third-party performance assessment of the device and requested the agency to submit the report. The required report was subsequently submitted, and in another technical committee meeting held

on 27.09.2023 approved the device.

Since JMP Talent Works, Jetco Polymers, and KM Precast Works have submitted all the required documents, and their devices were placed before the rate fixation committee constituted vide paper read as 6th above for fixing the unit rate.

The rate fixation committee meeting held on 29.01.2024 vide paper read 6th above verified and scrutinized the rate split-up submitted by the agencies. For JMP Talent Works, the committee requested detailed specifications including ISI standards and minimum quality requirements. The agency promptly provided the required documents.

Additionally, the committee decided that the sample of the Garden Composter by M/s Jetco Polymers should be tested by the agency at CIPET, and the detailed specifications should be reported back. In compliance with this directive, M/s Jetco Polymers promptly submitted the CIPET test report along with detailed specifications.

For the Underground Kitchen Waste Disposal Tank by M/s KM Precast Concrete Works, the rate fixation committee asked them to submit a corrected specifications including the grade of RCC used. The agency was directed to provide the updated documents, and they have submitted the revised documents accordingly.

Since JMP Talent Works, Jetco Polymers, and KM Precast Works have submitted all the required documents, the Rate Fixation Committee approved the unit rates for the proposed waste management devices

As per the recommendation of the committee, the revised specifications, unit cost, and O&M protocol for household level/ small-scale unit solid waste management plants/ devices, appended as Annexure 1, are hereby approved on a pilot basis for a period of 2 years from the date of approval. The devices/agencies must fulfill the following general conditions:

### **General Conditions**

#### **1. Details of Unit cost**

- The unit cost approved against the devices are including cost of materials, tools and equipment as per standards, specification, labour, training, conveyance including installation at the household/user location and commissioning the facility.
- All incidental expenditure including cow dung/ inoculum and other expendable items required for completing the unit has to be provided and it is inclusive of the unit cost.
- The agency undertaking the supply shall also train the beneficiary in operation and capacity building of the unit and shall provide user's manual/ guideline.
- The agency should also provide a two-year free warranty period from the date of installation of the unit during which they shall repair/replace all defective items at of cost.
- The entire facility shall be designed/ fabricate/ supplied/ installed using appropriate technology for the safe use by the beneficiary.

- **While implementing projects for supply of SWM devices approved by this order, the implementing officers of LSGIs shall ensure provision for GST as per prevailing norms is included in addition to the approved unit cost.**
- The implementing/ service providing agency shall mandatorily inspect the waste treatment plant/ device established by them within the warranty period (at least 2 years) once in three months and once in a year thereafter, to ensure their functionality and, if necessary, proposal for maintenance/ renovation and operationalization shall be made to the beneficiary/ concerned local self-government institution.

## **2. Mode of implementation**

- As per the statements provided by the proponents, no patents/ trademarks have been claimed so far for the design/ processing of the devices. Hence, as per patent norms, the device approved hereby shall not be eligible for patent claims as it is known fact and available in public domine. The same fact has been mutually agreed by the proponent.
- The work shall be executed through service Providers approved by Government/ Suchitwa Mission, through a competitive limited tender or

through an accredited/ authorized agency approved by government specifically for the purpose, as per laid down procedures approved by the government from time to time. In any case, the rates shall not exceed the approved unit costs.

- All Government rules, norms and orders related to acceptance of tenders, execution of project, entering into agreement, payment of bills and release of security/ performance guarantee shall be strictly followed while implementing the projects.

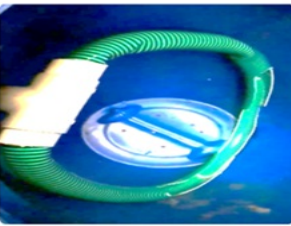
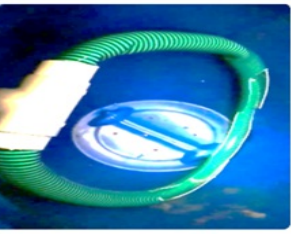
Encl: Specifications with unit cost.

*Sd/-*

U.V Jose IAS (Retd) \*  
Executive Director

\* This is a computer system (Digital File) generated letter. Hence there is no need for a physical signature.

Annexure

| Sl. No | Name of waste management unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Unit rate excluding GST (in Rs.) |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| 1.     | <p><b>BIOPOD Kitchen Waste Management Unit</b></p>    <ul style="list-style-type: none"> <li>• This system includes a 50-liter capacity (2.5 mm thick) PVC bucket,</li> <li>• a T-shaped pipe for air ventilation and Black Soldier Fly attraction,</li> <li>• an inner green suction tube of 1.3 m connected to a plastic bottle for BSF larvae collection, and</li> <li>• a separate 1500 ml PVC bottle for storing BSFL.</li> <li>• Additionally, it features a PVC pipe for leachate drainage with an attached strainer to prevent clogging.</li> </ul> | 770                              |
| 2.     | <p><b>BIOPOD Kitchen Waste Management Unit</b></p>    <ul style="list-style-type: none"> <li>• 250 Liter capacity (4 mm thick) HDPE barrel.</li> <li>• a T-shaped pipe for air ventilation and Black Soldier Fly attraction,</li> <li>• an 2 inch inner green suction tube of 2.4 m connected to a plastic bottle for BSF larvae collection, and</li> <li>• a separate 2 L PVC bottle for storing BSFL.</li> <li>• Additionally, it features a PVC pipe for leachate drainage with an attached strainer to prevent clogging.</li> </ul>               | 2620                             |

### Garden Composter



3.

4555

- All components are constructed from PPCP-UV stabilized material.
- The set includes five nos. of 3 mm thick inner composter tubes for waste digestion, each with a top diameter of 17.5 cm and a bottom diameter of 14 cm, the topmost tube featuring a lid measuring 23 cm in diameter.
- Additionally, there are five 3 mm thick outer herb planting rings, each with seven pockets, designed for the plants to grow by absorbing nutrients and excess water from the compost.
- The unit also contains one 3 mm thick sliding composter screener and one 3 mm thick compost collection drawer.
- A base is provided to hold the unit, within which the sliding composter screener and compost collection drawer are placed.
- Accessories include 1 kg of inoculum and a user manual.

### Underground Kitchen Waste Disposal Tank (preferable at low water table areas)



4.

4125

- The waste disposal system includes two cylindrical tanks (M20 RCC), each with an outer diameter of 90 cm and an inner diameter of 80 cm, installed below ground level. The tanks have holes on the surface of ring for leachate drainage.
- The top and bottom of each tank are sealed with 5 cm thick circular slabs (M20 RCC) of 90 cm diameter. The top slab features a central 5-inch hole

and stainless-steel hooks for lifting.

- A 5-inch PVC pipe, 60 cm in height, is mounted at the center of the top slab for inserting bio waste and is securely closed with a 6-inch end cap that includes a holder.
- For air ventilation, two 1-inch U-shaped PVC pipes are attached at an angle to the ring.
- The system is designed to compost or digest 3-4 kg of biodegradable waste per day.
- Included accessories are 1 kg of inoculum and a user manual.

**U.V Jose IAS (Retd)**  
**Executive Director**  
**Suchitwa Mission**