

## PROCEEDINGS OF THE EXECUTIVE DIRECTOR, SUCHITWA MISSION

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

**Sub:-** LSGD - Suchitwa Mission- Greywater Management- Empanelment of Agencies for DPR Preparation and Handholding, DPR Preparation & Execution of Greywater Management Projects in establishments vested under the Local Self Government Institutions (LSGs) in Kerala - Orders Issued

**Read:-**

1. EOI invited by Suchitwa Mission for the Empanelment of agencies for DPR preparation, Execution and Project execution of Greywater Management Projects vide Notification No. 3469/G/2024/SM dated 06/12/2024.
2. Technical evaluation of agencies for empanelment held on 25.02.2025 in KTDC Grand Chaithram.
3. Online technical evaluation of agencies for empanelment held on 01.03.2025.

No:SM/390/2025-G1

Dated: 06-07-2025

### ORDER

The State of Kerala currently recognizes the urgent need to implement Grey Water Management (GWM) projects across the State. One of the major challenges faced by Kerala in setting up GWM Projects is the unavailability of land, unsuitable soil, siltation in drains, high groundwater table and frequent flooding. Constructing infrastructure on uneven terrain requires more resources and sophisticated engineering solutions, which can increase costs and complexity. To facilitate the Local Self Government Institutions and ease the implementation of the Greywater Management facilities, the Suchitwa Mission invited agencies to submit Expressions of Interest (EOI) for DPR Preparation, DPR Preparation & Execution, and Project Execution of Greywater Management Project as per reference (1). The EOI called via ref 1 was for empanelling the agencies in three different categories as follows. Category 1 : DPR Preparation and GWM project Execution, Category 2 : GWM project Execution, Category 3: DPR Preparation and Handholding support. Based on the evaluation criteria stipulated in the EOI vide ref 1, the agencies and startups were shortlisted. The shortlisted agencies and startups were invited for a technical presentation as per references (2) and (3). Based on the presentation and its evaluation, the committee approved the empanelment of the agencies and the startups for the respective categories they have applied. The tenure of the empanelment will be **THREE** years from the date of these proceedings.

Qualified agencies are empanelled under two viz Category 1 : DPR Preparation and GWM project Execution and Category 3: DPR preparation and Handholding support. There were no sufficient number of agencies under the Category 2 : GWM project Execution. Hence, the empanelment is done for two categories (1&3), and the list of empanelled agencies and Startups with their contact details are given below.

SL .No	Name	Address	Contact Details	Agency/Startup
<b>Category 1 : DPR Preparation and GWM project Execution</b> The agency shall be responsible for <b>BOTH</b> design & execution.				
1	M/s Oxira Environmental Solutions	24/204, AYKARA BUILDING, KOTTARAMATTOM, P ALA, Kottayam, Kerala, 686575	Ajith Christopher, Ivin Jose Managing Director +91-8547695471 9605860505 oxirapala@gmail.com	Agency
2	M/s Aquatechnics Water Treatment Technologies	7/608, Aquatech House, South Paravoor, Udayamperoor, Ernakulam, Kerala 682307	P Pushpakumar Chief Executive Officer 9747384822 info@aquatechnicsindia.com	Agency
3	M/s EcoTec Engineers and Consultants	EcoTec Engineers and Consultants, New No. 141, Old No. 191, 1st Floor, East Coast Road, Uthandi, Chennai - 600 119	Jacob Varghese 9444039589 9176611450 jacob@ecotec.in	Agency
4	M/s AQUAXIA	AQUAXIA WATER SOLUTIONS LLP,	Monisha Mohanadas Managing Partner	Agency

	A WATER SOLUTIONS	C.C. XVI/1234L GOODLUCK BUILDING, Opp. GEO HOTEL	8589073030 aquaxiawatersolutions@gmail.com	Agency
5	M/s Hubert Enviro Care Systems Private Limited	HUBERT ENVIRO CARE SYSTEMS (P) LTD A-21, (Behind Lions Club School) III Phase, Thiru Vi Ka Industrial Estate, Guindy, Chennai - 600032.	Shyamprakash Regional Manager 8939815996 marketing@hecs.in	Agency
6	M/s Areena Hygiene Solutions Pvt.Ltd	Areena Hygiene Solutions Pvt.Ltd 2nd Floor, Door No: 1/3724 F Absonz Arcade (Opp. to St. George Cathedral) Nadakkave, Calicut, Kerala, India	Dr Reena Anilkumar Managing Director 9446042333 8891042333 areenahygienesolutions@gmail.com	Agency
7	M/s Envirochem Laboratories (P) LTD	ENVIROCHEM LABORATORIES (P) LTD., Ist Floor 5/58 9/18, Thozhuthungal Building Kovilakathumadam, Thrissur - 680020	Leena K O Managing Director 9446433147 9497714731 envirochem.lab@gmail.com leena@envirochemlabs.com	Agency
	M/s ENSYS Technologies	Ensys Technologies [1] Pvt. Ltd   Ken Biolinks Pvt. Ltd.	Dr. A K Nathan	

8	M/S ENSYS TECHNOLOGIES Pvt Ltd	Medisys Inc. Environmental Solutions Inc. 41, Seventh Avenue, Ashok Nagar, Chennai - 600 083	Managing Director 9962011088 ensys@ensysindia.com	Agency
9	M/s WTE Infra Projects Pvt. Ltd.	WTE Infra Projects Pvt. Ltd.  Corporate Office: S. No.438, Sagar Complex, Old Pune-Mumbai Highway, Opp . Kasarwadi Railway Station, Pimpri Chinchwad, Pune, Maharashtra-411034.	Sudhakar Wabale Sr. Executive Business Development. 9373721300 Monika Shinde Sales Coordinator 8888889611 enq@wteinfra.com sales3@wteinfra.com	Agency
10	M/s Technology and Governance Support Forum (TAGS Forum) Alleppey	Technology and Governance Support Forum (TAGS Forum) Alleppey, Puthumpally, Poonthopp ward Avulookunnu PO , Alleppey, 688006	Alfiya A Environmental Engineer +91 884-8282467 alfiya@tagsforum.com	Startup
11	M/s GeoBlue water solutions	GeoBlue water solutions, Door No.909, SH Convent Road, Near Midhunapilli Temple, Thrissur - 680020	Mr.Ranjith P Dinesh Managing Director +91 85939 01528 +91 9778423632 info@geobluein.com	Startup
	M/s JalSevak S	JALCONSERVE TECHNOLOGIES PRIVATE LIMITED	Dr Abhijit Sathe Chief Executive Officer	

12	solutions (Jalconsolve Technologies Pvt Ltd)	Building No. 2, Lane No. 3, Survey No. 44/32, Narhe Industrial Area, Narhe Village, Pune-411041	9930125888, 9930825888 abhijit.sathe@jalsevak.in enquiry@jalsevak.in	Startup
<b>Category 3: DPR preparation and Handholding support</b> The agency shall be responsible <b>ONLY</b> for design & handholding				
1	M/s Paradigm Environmental Strategies Pvt Ltd	150, 2nd Main, S T Bed Layout, Koramangala 4th Block, Bangalore 560 034, Karnataka, India.	Rajendra prasad D S Manager +91 97420 20151, +91 78924 89701 info@ecoparadigm.com	Agency
2	M/s Tata Consulting Engineers Ltd	Tata Consulting Engineers Ltd  Unit no NB 1502 & SB 1501, 15th floor, Empire Tower, Cloud City Campus,  Opp Reliable Tech Park, Thane-Belapur Road,  Airoli, Navi Mumbai 400 708	Sudil Mani Deputy general manager - Business Development  98453 39742 smani@tce.co.in	Agency
3	M/s CDD India Bangalore	Chief Executive Officer  CDD India Survey No.205 Opp. Beedi workers Colony Kormaghatta Road, Bande Mutt, Kengeri Satellite Town, Ben	Andrews Jacob Project manager  9535532653 andrews.j@cddindia.org	Agency

		galuru, karnataka 560060		
4	M/s ABHIJIT BHANAP CONSULTANTS AND CONTRACTORS	4th Floor Mahadev Apartment Padval Ali, Chafekar Chowk, Chinchwad Pune -411033	Abhijit Bhanap, Nikesh Patil  Directors 9890081319, 7972968395 abccoffice23@gmail.com	Agency
5	M/s Centre for Urbanization, Buildings & Environment	Centre for Urbanization, Buildings & Environment Module No.6C, 6th Floor, Phase II Building, IIT Madras Research Park, Kanagam Road, Tharamani, Chennai, Tamil Nadu 600113	Mr. L. Padmanaban (Major General Retd.)  CEO 9500083628 office@cubeiitm.org	Agency
6	M/s ECOSTP Technologies (P) Limited.	ECOSTP Technologies (P) Limited. Brigade REAP, Brigade Gateway Campus, 26/1, Dr. Rajkumar Road, Rajajinagar, Bengaluru, 560 055, India	Anju Nair Business Manager Kerala 8590914849 Praveen Sarvanan Product Head 9048463402 anju@ecostp.com	Startup
7	M/s Urban Grey Water Solutions	Urban Grey Water Solutions, 1/422 1st Floor, Charutha Complex, Mathara-Palazzi Road Iringallur.	Sooraj M Managing Partner	Startup

	ns	Behind MetroMed International Cardiac Centre, Kozhikode, Kerala - 673014	9526704040 info@urbangrey.co.in	
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### **Procedure to be followed to engage these agencies**

#### **Procedure to be followed to engage the agencies/startups under Category 1 for the project implementation**

##### **1. Preparation of Prefeasibility Report**

Greywater Management Projects are to be done at community level as per the funding of S BM(G) guideline. The following need to be ascertained before tendering.

- a. Characteristics of influent wastewater. (pH, BOD,COD, TSS, oil and grease)
- b. Capacity of the Treatment Plant
- c. Possibility of laying small bore sewers preferably under gravity
- d. Proposed Treatment Scheme
- e. Expected effluent parameters based on the end use of treated water
- f. Approximate Cost of the Treatment System

If the Local body requires the support of an external agency in this regard, a prefeasibility report can be prepared with the help of Empanelled DPR Consultants by Suchitwa Mission (Empanelment of DPR Consultants Proceedings No. SM/425/2025-G1 dated 23.03.2025 by Executive Director Suchitwa Mission)/ Accredited Agencies/Research Organizations such as CSIR-NIIST, Trivandrum/ Academic Institution/Subject experts in the Technical Resource Bank constituted by AMRUT. Mode of Selection shall be based on the prevailing rules.

Local bodies may request financial assistance from Suchitwa Keralam(Rural) to meet the cost of this. Suchitwa Mission can release it based on the funding availability.

##### **2. Tendering the Project for two cover bid system**

Based on the details mentioned in the preparatory, the implementing officer shall float a tender in two cover bid systems. Technical bid shall be verified and financial bid of eligible technical bid is to be opened. The lowest financial bid may be accepted and work can be awarded.

Local bodies may avail the assistance of Suchitwa Mission for the evaluation of technical bids.

##### **3. O&M**

O&M is an integral part of Used water management projects. O&M Contract shall be executed with the same agency for at least one year. Then onwards O&M Contract shall be executed with the same agency or others through transparent bidding process. It is advisable to train a local person as the operator. In the case of nature based treatment systems, a trained local operator would be sufficient. The agency that constructed the Plant may insist on site visits once in 6 months to do troubleshooting. This may be included in the O&M contract.

### **Procedure to be followed to engage the agencies/startups under Category 3 for the project implementation**

Local bodies are advised to do limited tendering among the agencies listed under the Category 3 for the consultancy charge of DPR Preparation in terms of Percentage of Technical Sanction Amount. Lowest quoted agency can be selected and work can be awarded.

### **General Conditions**

The general considerations that may apply to all the Categories are listed below:

1. **Technology :** The technologies applicable for the Greywater Management facilities are mentioned in the manual for community-level Greywater Treatment. The detailed technical notes and design procedures can be obtained from the manual published by the Department of Drinking Water and Sanitation (DDWS), GoI. ([https://swachhbharatmission.ddws.gov.in/sites/default/files/Technical-Notes/Greywater\\_Management\\_Manual\\_English.pdf](https://swachhbharatmission.ddws.gov.in/sites/default/files/Technical-Notes/Greywater_Management_Manual_English.pdf)). The technology considering for the GWMF shall be nature-based, cost-effective, easily manageable and less maintenance. In an inevitable circumstance, the agency can choose the other technology options, providing sufficient justification for using the same. GWM Facilities preferably shall be free from moving parts and be a nature-based system to reduce the O&M requirements.
2. **Conveyance:** It shall be designed and implemented by the empaneled agency (if applicable) and conveyance shall be through gravity sewers or small bore sewers or through a suitable means, depending on the site conditions. The agencies empanelled are advised to refer to the toolkit for Greywater Management emphasizes the strategy planning for Greywater Management at the household level and community level ( <https://swachhbharatmission.ddws.gov.in/sites/default/files/Technical-Notes/GWMtoolkit.pdf>)
3. **Technical approval by Suchitwa Mission:** The successful bidder will be given the work order by the LSG. In the mode of implementation through Category 1 and Category 3, agencies shall prepare the DPR and shall obtain the approval of process flow from the Technical Committee of Suchitwa Mission.
4. **Technical Sanction by LID&EW:** Based on the approval of process flow from the Technical Committee, the Concerned Engineer from LID & EW (based on the financial power) shall issue a Technical Sanction through PRICE.
5. **Scope of Local Bodies**
  - a. The LSGIs will be using the empanelment as a prequalification for getting an



offer for DPR preparation or both DPR preparation & execution. Under no circumstances work will be awarded directly to any agency by the LSGs. Work will be awarded only to the lowest bidder through a limited tender among the empanelled agencies.

- b. The land allocation, power connection, and funding will be through the LSG. All the disputes related to land and public unrest will be resolved by the LSG.
- c. Responsibility of ensuring Operation and maintenance of the GWM Facilities is vested with LSG
- d. The service of consultants received from LSGs, the same would be considered seriously and appropriate action shall be taken after proper investigation. If allegations against a consultant are found to be true, Suchitwa Mission reserves the right to cancel the empanelment.

## 6. Scope of Agencies

- a. The agency shall design and construct (category 1) GWM Facilities (Grey Water Management facilities) based on the Characteristics data of influent wastewater
- b. The implemented GWM Facilities shall not cause inconvenience to the users, and they should be free of odour, noise, emissions, or any other disturbances.
- c. The agencies shall undertake the percolation test to ascertain the percolation capacity of the soil in case of soil absorption systems.
- d. The empaneled agencies take part in the bidding process carried out by the LSGs to get competitive pricing for the GWM Facilities.
- e. Support the LSGs in preparing documents for getting statutory approvals from concerned departments for the project.
- f. The agency shall prepare the DPR as per the approved DPR Template provided by the Suchitwa Mission.
- g. The consultant will be required to make presentations before the technical committee of Suchitwa Mission/authorized agency as a part of the evaluation for Process flow approval for the DPR. The suggestions of the aforementioned committee shall be considered for inclusion in the Final DPR, which shall be submitted by the agency to the LSGs for obtaining Technical Approval/Sanction.
- h. The consultant shall monitor the construction of the greywater management facility from the beginning till the completion of trial run.
- i. Checking the performance of the plant during trial run and analyzing the treated water characteristics to ensure that the parameter limits are within standards prescribed by the Kerala State Pollution Control Board.

- j. After the completion of the trial run, the consultant shall submit a letter of satisfaction to the concerned LSGs on the functioning of all the modules and on the performance of the plant in total.
- k. After issuance of the Technical Approval/Sanction, the agency shall complete and commission the GWM Facilities and it shall not exceed 6 months from the approval or sanction date. The agencies shall conduct topography, terrain and other required assessments for the efficient conveyance of greywater. The agency shall prepare a Standard Operating Procedure (SOP) in Malayalam and English for operating and maintaining the GWM Facilities and conveyance system during the handover of the work.
- l. The enlisted agencies and startups shall take part in all the tenders issued by different LSGs and participation in at least 2 such tenders in a year shall be a criteria for renewal / enlisting afresh the agency in the area.

As per the above, a total of **9 (nine)** agencies and **3 (three)** startups are currently empanelled for DPR Preparation & Execution of Greywater Management Projects, and a total of **5 (five)** agencies and **2 (two)** startups are currently empanelled for DPR Preparation and handholding support for the Greywater Management Projects by Suchitwa Mission.

U.V.Jose IAS (Retd)

EXECUTIVE DIRECTOR

To

Concerned Agencies

Copy To

1. Principal Director, LSGD
2. All District Suchitwa Missions
3. Stock File