

**This is a draft translation of the original Marathi Government Resolution (GR) issued by  
Government of Maharashtra**

Administrative approval to construct Faecal  
sludge treatment plant (FSTP) for  
treatment of faecal sludge collected safely  
and regularly from the septic tanks of the  
toilets from the urban local bodies under  
Swachh Maharashtra Abhiyan (Urban)

**Government of Maharashtra  
Department of Urban Development  
Government Resolution Number: SMA 2019/P.No.124/UD-34**

Hutatma Rajguru Chowk, Madame Cama Road,  
4<sup>th</sup> Floor, Mantralaya, Mumbai 400032.

Date: 8<sup>th</sup> November, 2019.

**Ref:**

- (1) Government Resolution, Department of Urban Development, Number SBM 2015/P.No.23/UD-34 dated 15 May, 2015.
- (2) Government Circular, Department of Urban Development, Number SMA 2017/P.No.31/UD-34 dated 17 March, 2017.
- (3) Government Circular, Department of Urban Development, Number SMA 2017/P.No.263/UD-34 dated 30 December, 2017.
- (4) Government Resolution, Department of Urban Development, Number SMA2017/P.No.263/UD-34 dated 15 December, 2018.
- (5) Government Resolution, Department of Urban Development, Number SMA 2019/P.No.82/UD-34 dated 24.05.2019.
- (6) Government Resolution, Department of Urban Development, Number SMA 2019/P.No.105/UD-34 dated 11.09. 2019.

**Introduction:**

As per the reference Government Resolution no. 1, , implementation of “Swachh Maharashtra Abhiyan (Urban)” was done on the lines of the “Swachh Bharat Abhiyan (Urban)” of the Central Government . There are two important aspects of this Abhiyan. First aspect is to make the city

**“Open defecation free”** by providing individual household toilets to all and community toilets to those families who do not have space to construct individual toilet. One. Second aspect is of making the cities **“Clean”** by managing city’s solid waste in accordance to Municipal Solid Waste Management Rule, 2016.

2. Accordingly, under this Abhiyan, all urban areas of the state have been declared as open defecation free since 1<sup>st</sup> October, 2017.

3. After the declaration of open defecation free, these cities are being made **"ODF+"** to sustain their open defecation free status and to provide better toilet facilities to their citizens. Now, these cities need to achieve **"ODF++"** status by providing safe and regular management as well as treatment of the faecal sludge and septage.

4. While achieving the open defecation free status under the Swachh Maharashtra Abhiyan, toilets are connected to sewer system, where it exists, or to a septic tank. . For toilets connected to septic tanks, it is necessary to collect the faecal sludge and septage from the septic tanks and treating it safely and regularly.

5. At present, in 36 cities of the state, a complete or partial Sewage System and Sewage Treatment Plant (STP) exist and are functional. Safe and regular management and treatment of the waste water in these cities is being carried out at the Sewage Treatment Plant (STP) of the same city. To ensure safe and regular management and treatment of the faecal sludge of in 32 cities, which do not have a sewerage nor a Sewage Treatment Plant (STP), but fall within 20 Kms radius of the cities having the Sewage Treatment Plant (STP), instructions have been given as per the Reference number 4 of the Government Resolution dated 15<sup>th</sup> December 2018 to carry such sludge for co-treatment to the nearby STP. . Also, 5 cities in the state have an independent Faecal Sludge Treatment Plant (FSTP) for treating faecal sludge from the septic tanks. In this manner, the faecal sludge from the septic tanks of toilets in 73 cities out of 384 in the state, is being treated in safe and regular management. Since the faecal sludge in the septic tanks from the remaining 311 cities needs to be treated through safe and regular management, it is necessary to select an appropriate technology and subsequent adoption of the same.

6. Under the Swachh Maharashtra Abhiyan, as a part of Memorandum of Understanding (MoU) with the Center for Environmental Planning and Technology (CEPT), Ahmedabad, this

organization has suggested following 4 technical options for treatment of fecal sludge in septic tanks. All 4 technical options have been vetted by NEERI.

- 1) Sludge Drying Bed (S.D.B.) with ABR+PGF+Disinfection unit
- 2) Planted Sludge Drying Bed (P.S.D.B.)
- 3) Moving Bed Biofilm Reactor (M.B.B.R.)
- 4) Upflow Anaerobic Sludge Blanket (U.A.S.B.).

7. In accordance with the above, the issue of selecting and approving a suitable technology for safe and regular management and treatment of the faecal sludge from the septic tanks of 311 cities in the state, was under the government's consideration.

**Government Resolution:**

Considering the points mentioned above, the technical option approved by NEERI, the Sludge Drying Bed (S.D.B.), with ABR and PGF is easy to implement, has easy availability of material required for the construction and installation of the project with the local contractors, requires minimal electricity for the functioning of the project and is not affected by the interruptions in electricity supply. Also, the project is easy to maintain. Thus, the government is giving an approval to set up a Faecal Sludge Treatment Plant (FSTP) by selecting this technology for safe and regular management and treatment of the faecal sludge from the septic tanks in those cities in the state where the Sewage Treatment Plant (STP) is not present.

2. Considering the number of urban local bodies in the state, for processing of the sludge from the septic tanks in that city by removing the sludge using a vacuum emptier, the government is giving administrative approval to install Sludge Drying Beds (S.D.B.) of requisite capacity, with the division-wise price given next to it (as per the division-wise rate list provided by the Maharashtra Jeevan Pradhikaran), subject to terms and conditions mentioned in paragraph 3 below.

Sr. No.	Population of Local Urban Body	Capacity of Sludge Drying Bed (S.D.B.) Kilo Litre per Day (KLD)	Project Cost (Rupees)					
			Amravati Division	Nagpur Division	Konkan Division	Nashik Division	Pune Division	Aurangabad Division
1	2	3	4	5	6	7	8	9
1	Up to 15,000	3	9,09,275	9,09,275	9,52,087	9,20,767	9,45,379	9,18,560
2	15,001-25,000	5	11,13,325	11,13,325	11,70,904	11,28,940	11,61,091	11,25,701
3	25,001-50,000	10	17,06,918	17,06,918	18,07,415	17,34,194	17,89,207	17,28,404
4	50,001-75,000	15	21,61,964	21,61,964	22,95,571	21,99,021	22,69,533	21,90,253
5	More than 75,000	20	25,39,156	25,39,156	27,00,136	25,84,520	26,67,253	25,72,962

(A) A division-wise list of urban local cities permitted to install Sludge Drying Bed (SDBs) is given with this Government Resolution as an **Attachment-1**. Capacity and the estimated project cost of the Sludge Drying Bed (SDB) approved for the respective urban local body as per their population has been mentioned in this.

(B) The Type Plan and Sample Estimate of the Sludge Drying Bed (SDB) with the capacity given in column 3 of the above statement has been approved by the Maharashtra Jeevan Pradhikaran vide letter number manisans/MJP.Cell/Nagarotthan /CR 527/2019 dated 4/6.11.2019.

#### 4. **Terms and Conditions:**

4.1 The concerned Municipal Corporation / Municipal Council / Nagar Panchayat shall be the implementation agency for this project.

4.2 The Sludge Drying Bed (S.D.B.) should be installed on the site available with the urban local body, but mainly only in the area available for solid waste management.

4.3 The details of the division-wise estimated expenditure for the construction of the Sludge Drying Bed (S.D.B.) according to its capacity has been given as **Attachment-2** along with this government resolution.

4.4 While installing / constructing a Sludge Drying Bed (S.D.B.), it is binding on the concerned urban local body to make use of the Type plan sent by the State Mission Directorate. In the said work or sub part of the work implementation agency should not make any change (related to size and measurement).

4.5 There is provision in the rate list of Maharashtra Jeevan Pradhikaran to give lead charges for the material. However, since this estimate is a sample estimate prepared on the basis of the Type plan, it does not include material lead. Therefore, the material lead charges should be calculated and included considering the local situation. **However, these lead charges should not exceed 5% of the sample estimated cost.**

4.6 All general excavation provisions are considered in the sample estimate. However, action should be taken according to the geology at the work site.

4.7 The sample estimate does not include charges of royalty and G.S.T. Therefore, regarding royalty and G.S.T. charges, payment should be made on the basis of amount paid by the contractor.

4.8 The said estimate is a Type Estimate and should be implemented in the same manner according to excavation strata as per the trial pit result.

4.9 In general, it will be binding to construct the sludge drying bed (SDB) and Anaerobic Baffled Reactor (ABR) in such a way that the water from the sludge drying bed (SDB) will flow by **gravity** to the Anaerobic Baffled Reactor (ABR).

4.10. There is a provision of four pumps in the sample estimate. However, it is not necessary to buy all four pumps at the same time. A decision about this should be taken by the implementation agency considering the actual regional situation.

4.11. Since an urban local body is the implementation agency for this project and it is necessary to implement a technically sound project, the concerned Commissioner, Municipal Corporation / Chief Officer, Municipal Council / Nagar Panchayat should fill up Undertaking in **Attachment-3** attached with this Government Resolution and send it to the State Mission Directorate..

4.12 After the project work has started and after the competent authority has certified the quality of work and payments, it shall be the responsibility of the concerned urban local body/ implementation agency to clear work related payments of relevant contractor within 15 days from the available funds.

4.13 The concerned urban local body should develop a mechanism necessary to attain the maintenance and repair cost of the project in future.

5. An approval is being given to cover the cost of installation of this Sludge Drying Bed (S.D.B.) from 50% of 14<sup>th</sup> Finance Commission's funds reserved for Swachh Bharat Abhiyan which are made available to the urban local bodies.

6. In order to implement this project, the government is giving approval to all concerned urban local bodies to publish a short-term tender (of 7 days) by abiding the relevant rules.

7. After publishing short-term tender notices in accordance with the above approval, all concerned urban local bodies should finalize it by November 20, 2019, and the concerned contractor should be asked to start the work after making a contract as per rule and by issuing a work order. An attempt should be made to complete these tasks by November 30, 2019.

8. The said Government Resolution is made available on the website of Government of Maharashtra [www.maharashtra.gov.in](http://www.maharashtra.gov.in) and its code is 201911081639508625. This order has been attested by a digital signature.

As per the order and in the name of the Governor of Maharashtra.

**Ajit Sahebrao Palwe**

(Ajit Palwe)

Desk Officer, Maharashtra Government

**Copy to:**

- 1) Principal Secretary to the Hon. Chief Minister, Mantralay, Mumbai
- 2) Hon. State Minister, Principal Secretary for Urban Development, Mantralay, Mumbai
- 3) Chief Secretary, Maharashtra State, Mantralay, Mumbai
- 4) Principal Secretary (UD-2) Urban Development Department, Mantralay, Mumbai-32
- 5) Divisional commissioner (All)
- 6) Commissioner and Director, Directorate of Municipal Administration, Worli, Mumbai
- 7) Collector (All)
- 8) Commissioner, All Municipal Corporations
- 9) State Mission Directorate, Swachh Maharashtra Abhiyan (Urban) Mumbai
- 10) Regional Deputy Director, Municipal Branch, Collector Office (All)
- 11) District Administration Officer, Municipal Branch, Collector Office (All)
- 12) Chief Officer, Municipal Corporations/ Nagar/Municipal Panchayats, (All)
- 13) Select file activity, UD-34, Urban Development Department, Mantralay, Mumbai