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NOTIFICATION

No.B.11019/1/2025-PHE, the 19th May, 2025: As per approval of the Council of Ministers in its meeting held on 13.05.2025 conveyed vide No. J. 11011/1/2025-POL/Vol-I dt. 14.05.2025 and in the interest of public service, the Governor of Mizoram is pleased to notify the Mizoram Rural Water supply and Sanitation Operation and Maintenance (O&M) Policy, 2025.

1. Objectives of O&M Policy

The Operation and Maintenance of rural water supply systems and sanitation is primarily fundamental element to keep source and system sustainability. It is imperative to frame Mizoram Rural Water Supply and Sanitation Operation and Maintenance (O&M) Policy 2025 in order to achieve the following objectives:

- 1.1 Establish a uniform set of guidelines for the O&M of rural water supply systems and sanitation across the state.
- 1.2 Ensure the long-term functionality and sustainability of water supply and sanitation infrastructure.
- 1.3 Promote the efficient use of resources and cost-effective service delivery.
- 1.4 Ensure community participation and ownership of water supply and sanitation systems.
- 1.5 Enhance the capacity of State/ Districts/ Village Council (Gram Panchayat)/ local bodies and stakeholders to manage O&M activities effectively.

2. Title, Extent and Commencement

- 2.1 These policies may be called 'Mizoram Rural Water Supply and Sanitation Operation and Maintenance (O&M) Policy 2025.
- 2.2 These shall apply to the rural village and habitation in Mizoram
- 2.3 These shall come into force on the date of publication of notification in the official gazette.

3. Definitions

In these policies, unless the context otherwise requires:

- a) 'Department' means Public Health Engineering Department (PHED)
- b) 'Government' means government of Mizoram.
- c) 'ground water' means sources such as wells, borewells, and tube wells.
- d) 'habitation' means separate small settlement having parent village.
- e) 'multi village schemes' (MVS) means a centralized water supply to several villages or habitations encompass all settlements within a Multi Village Council/Panchayat.

- f) 'NGO' means Non-Governmental Organization registered under the Mizoram Societies Registration Act, 2005.
- g) 'O&M' means Operation and Maintenance of completed water supply and sanitation scheme.
- h) 'rainwater harvesting' means collecting and storing rainwater for use.
- i) 'Single Village Schemes' (SVS) means an initiative designed to deliver water supply to single encompass all settlements within a Village Council or Panchayat,
- j) 'spring sources' means tapping natural springs for water supply.
- k) 'surface water' means water from rivers, lakes, and reservoirs.
- l) 'WATSAN Committee' means Village Water and Sanitation Committee.

4. Institutional Framework

4.1 State Water and Sanitation Mission (SWSM):

The State Water and Sanitation Mission (SWSM) shall be constituted by the Government of Mizoram and it is an apex committee in the state. The Committee shall perform to bring self-sustenance of water supply system and sanitation facility in the state in all aspects as follows:

- a) To develop O&M strategy and monthly tariff or user charges for ensuring financial sustainability of the system or scheme. To firm up policy on O&M accounts and its operation process by Village Council (Gram Panchayat) and/ or its sub-committee.
- b) To support in creation of District Water Sanitation Missions, ensure necessary capacity building, regular monitoring of its functioning. To create and maintain digital inventory of assets on a Geographic Information System platform.

4.2 District Water and Sanitation Mission (DWSM):

In every District, District Water and Sanitation Mission (DWSM) shall be constituted by the Government of Mizoram. The Committee shall perform to bring about improved water supply and sanitation in the District in all aspects as the following:

- a) To ensure availability of funds for source sustainability works and grey water management in villages through convergence.
- b) To help in formation of Village Water Sanitation Committee (WATSAN Committee) or User Groups, etc. and handhold.
- c) To recognize well-performing Village Council (Gram Panchayat) and/ or WATSAN Committee / User Group, etc. from time to time.
- d) To analyze data on health indicators, water-borne diseases, etc. for corrective action.
- e) To ensure grievance redressal.

4.3 Village Water & Sanitation Committee (WATSAN Committee) :

In every village and habitation, a Village Water and Sanitation Committee (WATSAN Committee) shall be constituted by the Government of Mizoram. The WATSAN Committee is expected to generate a sense of ownership, ensure the financial viability and sustainability of source and system. The Committee shall perform to bring about improved water supply and sanitized village in all aspects.

5. Service Delivery and Utility Development Approach

- 5.1 The combination of infrastructure and management arrangements required to ensure affordable, safe and reliable water for users and sanitation facility. The planning would be based on the long-term plan for the State water supply sector as a whole and will address the issues pertaining to water security, sustainability of sources and sustainability of sanitation systems.
- 5.2 This will require the current administrative structure to transform from present 'department-based and construction or infrastructure development' to 'utility based' based approach. There is a need to shift

focus from water supply and sanitation infrastructure creation to water and sanitation management, viz. service delivery.

- 5.3 The approach, inter alia includes sustainable O&M of the systems, undertaking water budgeting and audits at regular intervals, cost recovery, reducing the energy charges by adopting conjunctive use of water as well as use of conventional and non-conventional energy specifically solar, measuring the water used and accounting for the same, addressing the grievances proactively.

6. O&M Framework

The following O&M framework for single village schemes and multi-village schemes are most preferred to manage and maintain rural water supply systems:

- 6.1 All villages whether Single or Multi Village Schemes should be handed over to the Village WATSAN Committee.
- 6.2 The existing employees engaged by the Department will continue their work at the same post for operation and maintenance on the basis of hand holding support by signing agreement between the PHED and WATSAN Committee for the time being and further extension may also be granted in view of capability level of WATSAN Committee on O&M of the Scheme.
- 6.3 The Skill Development training on plumber, pump operator, electrician and mason has been organized in collaboration with State Institute of Rural Development and Panchayati Raj (SIRD & PR), Mizoram from time to time and the trainees will be selected by the WATSAN Committee as per their requirement of trade. The trained persons can be utilized for O&M of the Scheme by the WATSAN Committee in their respective village.

7. Source sustainability and management of wastes.

- 7.1 To elevate source sustainability as a primary mission, necessitating measurable targets and concerted efforts at the local level to map the catchment areas and aquifers wherever surface water or groundwater is the source of the water supply scheme. The proper and reliable waste management need to keep sustainability at all times. The Village Water and Sanitation Committees (WATSAN Committee) should actively involve local educational institutions to build local capacities for accessing scientific information and implementing sustainable water management practices. A special programme on this should be initiated with required budgetary support.
- 7.2 A strong policy on information, education and communication (IEC) is required, and periodic activities should be conducted to sensitize local communities, share knowledge and generate awareness on source sustainability, water conservation, and possible local-based solutions by engaging all stakeholders.
- 7.3 To implement strategies to manage the land surrounding the water source, which may include afforestation, controlled grazing, and agricultural practices that minimize soil erosion and runoff. State must take necessary action in case of contamination found at water source or village's level remedial within prescribed turnaround time for both chemical and bacteriological contamination. To promote practices such as rainwater harvesting, groundwater recharge, and watershed management to ensure the long-term viability of water sources. To strengthen regulatory oversight to ensure compliance with contamination of water source, any activities depleting water sources and dumping of wastes as per the provision Acts and Rules in force.

8. Water Quality Framework

The Water Quality Framework is a comprehensive approach to ensure the safety and purity of water from its source to the point of delivery. It encompasses a series of stringent standards, testing protocols, and collaborative efforts aimed at protecting public health and maintaining the integrity of

water supply systems. This para delineates the multifaceted strategies and actions required to preserve water quality according to the BIS-10500 standards, including the establishment of water testing infrastructure, community involvement, and adherence to national and international guidelines, National Accreditation Board for Testing and Calibration Laboratories accreditation for water quality laboratories for chemical and microbiological testing.

9. Financial Sustainability

It is essential to establish a sound financial management system to make the water supply system financially viable. Controlling expenditure based on realistic expenditure budget estimates and increasing the income through regular cost recovery, part of which, can also be proposed to be met from other government scheme, Central/ State Finance Commission Grants, as well as state programs having water component included in it by the state.

- 9.1 The O&M would involve recurring costs like electricity charges, chemical costs; expenditure on preventive and breakdown maintenance, remuneration of pump operator, etc. The community therefore has a key role to play in aspects such as:
 - a) Using the revolving fund received from government judiciously;
 - b) Funds received as part of Finance Commission recommendation;
 - c) Arranging operation of the system through a barefoot technician;
 - d) Carrying out minor repairs;
 - e) Chlorination;
 - f) Water quality testing/ surveillance; and
 - g) Ensuring proper use of infrastructure, cleanliness near sources, etc.
- 9.2 WATSAN Committee (VWSC) will open an account to receive funds for O&M from different sources such as incentive fund from Jal Jeevan Mission (JJM), Finance Commission grants and community contribution to meet the recurring charges. Management and O&M of the water supply scheme and sanitation facility by VWSC recovery of user charges and full O&M recovery will form the cornerstone of the long-term sustainability of the scheme.

10. Human Resources and Skilling

The development and empowerment of human resources are critical components in the successful operation and maintenance (O&M) of water supply schemes and sanitation. Skilled personnel, known as Nal Jal Mitras and Swachhagrahi, play a pivotal role in ensuring the functionality and sustainability of these systems. The process of identifying, selecting, and skilling these individuals must be systematic and aligned with the particular programme guidelines. The comprehensive approach for the recruitment and training, the provision of necessary toolkits and resources, and additional measures to support and enhance their capabilities shall be undertaken in collaboration with SIRD and as per the O&M Framework at para 6 of this policy. This framework aims to build a competent and inclusive workforce that can effectively manage and maintain village water supply and sanitation schemes.

11. Capacity Building and Community Engagement

- 11.1 Capacity building and community engagement are essential for the empowerment of Village Water and Sanitation Committees (WATSAN Committee) to effectively manage their water supply schemes and sanitation programmes. These initiatives are designed to enhance the skills and knowledge of local stakeholders, ensuring they are well-equipped to handle the complexities of operation and maintenance (O&M) tasks. By fostering a sense of ownership and responsibility, the community becomes an active participant in the water management process, contributing to the overall success and sustainability of the service delivery.

- 11.2 Involve Village Water and Sanitation Committee in mass awareness activities on water conservation, water quality monitoring, sanitary inspection, awareness drives by school children, benefits of regular payment of water tariff, and the like nature. Training can also be provided to school children depending on their grade. For younger children the importance of good quality water and environmental cleanliness can be emphasized and for older children financial, O&M as well as activities such as testing their own tap water in school labs, Naupang Fai Duh Pawl (Children Sanitation Club) may create interest among the teenagers which may be communicated to the households as well.
- 11.3 Based on the identified roles and responsibilities, the capacities of the service providers (WATSAN Committee) should be developed to carry out daily tasks and ensure timely preventive maintenance actions such as water quality testing, cleaning of tanks, collection of user tariff, maintenance of daily records, and the like matters. Since departments face a shortage of manpower, online platforms for regular follow-up and mentoring for problem solving (not review) can be adopted, whereby the frontline service providers and WATSAN Committees can have access to block/district level officials for guidance.

12. Asset and Inventory Management

Asset and Inventory Management is a critical component of operational efficiency and sustainability in water supply and sanitation schemes at all administrative levels. Effective management ensures that assets are properly accounted for, maintained, and replaced, when necessary, while inventory levels are optimized to meet demand without excess. Asset and Inventory Management shall be done at all levels starting from WATSAN Committees (VWSCs) to State Level. It outlines the essential practices and strategies for robust asset and inventory management, from the creation of detailed asset registries to the implementation of water safety plans at the local level. The service delivery organizations can achieve a balance between cost-effectiveness and service reliability, ensuring that resources are used judiciously, and that infrastructure is maintained to support consistent service delivery.

13. Zero leakage Policy

- 13.1 Wastage of water at source, transmission, distribution and household (HH) level is a major concern. It can be attributed to various reasons including the following:
- a) Corrosion or deterioration of pipes, fittings or seals
 - b) Poor installation quality and practices
 - c) Thermal expansion and contraction of pipes
 - d) Third party damage
 - e) Weather or climate related factors including disasters affecting the pipes
 - f) Poor water practices at household (HH) level.
- 13.2 In building the capacity of WATSAN Committees, it need to promote use of technology to identify the leakage points and to address the leakage issues, awareness among the community and individual users plays crucial role. The community and users shall be effectively sensitized towards:
- a) Timely reporting of any leakage
 - b) Behavioral improvements of household (HH) for preventing wastage and emphasizing on the judicious use of water. If user charges are based on flat rate, it will not cost the households at present, but when volumetric rates will take over water charges will be higher. Developing, the responsibility matrix and fix responsibility of the department/agency and contractors for time-bound rectification of any leakage in the system. Developing the habit of water audit in every village and in each household (HH).

14. Schedule of Supply

The Schedule of Supply is a critical framework that outlines the systematic distribution and management of water resources to meet the needs of a community effectively. It encompasses strategies for equitable rationing, reliable scheduling, and adaptive management to ensure that water is available when and where it is needed, even in the face of challenges such as resource limitations and emergencies. It must be provided on creating a robust and flexible schedule that can adapt to varying circumstances, ensuring the sustainability and resilience of water supply and sanitation systems.

15. Water Conservation, Wastage, and Distribution Management

It is dedicated to the implementation of sustainable practices and technological solutions aimed at preserving water resources, minimizing losses, and ensuring fair distribution. It emphasizes the importance of community engagement, advanced monitoring, and strategic management to address the challenges of water scarcity and wastage, thereby promoting the efficient and responsible use of water across all sectors.

16. Wastewater and Grey Water Management

The Wastewater and Grey Water Management outlines the essential strategies and practices for the responsible handling, treatment, and repurposing of wastewater and grey water, with a focus on sustainability, public health, and environmental protection. The water and grey water management plan complies with local regulations and standards for water quality and reuse.

17. Emergency Response and Disaster Resilience in Water Supply Systems

In most of the disasters and emergencies, the main health problems are caused due to poor hygiene and insufficient water supply and the consumption of contaminated water. Formulating a detailed emergency response plan that addresses various potential scenarios, including natural disasters, contamination threats, and infrastructure breakdowns is crucial. This plan should outline the steps to be taken by operators and emergency personnel in response to such events. It may ear-marked an alternative source to serve as an option (albeit temporary) in emergencies. Implement a regular schedule of training programs and simulation drills for both district and sub-district level staff and community members to build and maintain a high level of emergency preparedness.

18. Efficient Grievance Redressal Mechanisms

Implementing robust grievance redressal frameworks ensures prompt resolution of consumer complaints at household, community, and WATSAN Committee (VWSC) levels. It should include easier complaint receiving process, responsibilities of individuals/agencies in addressing the grievance along with timeline, escalation procedures and penalties.

19. Penal Provisions

It is essential for Panchayats/Village Council and Village Water and Sanitation Committees (WATSAN Committee) to establish clear protocols for addressing instances of non-payment of water tariffs/sanitary user charges. These protocols may range from imposing penalties to the potential disconnection of service/ fines, as deemed appropriate. Ensure strict enforcement of penal provisions to maintain accountability and service quality.

20. Technology and Innovation

The modern technologies in O&M like collection of user charges, data management and information systems should be integrated. Innovative practices for water conservation and energy efficiency.

21. Legal and Regulatory Framework

21.1 The O&M framework must ensure that all operations are conducted within the bounds of legal and regulatory requirements to maintain the legitimacy and integrity of water supply services. It may be mentioned as below:

- a) Provide clear guidelines for compliance with national water policies, environmental regulations, and health and safety standards. This includes obtaining necessary permits, adhering to construction codes.
- b) Facilitate the resolution of legal disputes and provide a clear framework for the enforcement of regulations and penalties for non-compliance.
- c) Incorporate provisions for regular legal audits and reviews to ensure ongoing compliance with changing regulations and to adapt to new legal requirements as they arise, thus safeguarding the water supply services against legal and regulatory risks.
- d) Facilitate training and awareness programs for local authorities and community members on the legal aspects of water supply management, thereby empowering them to effectively navigate and uphold the regulatory framework.

22. Command and Control Centre, Monitoring performance.

22.1 A systematic approach to track the functionality and efficiency of water supply and sanitation systems, utilizing advanced technologies and thorough record-keeping to enhance decision-making and ensure the reliability of services.

- a) Establish command and control centers for real-time monitoring and management of water supply networks at district level.
- b) Use technologies like Geographic Information Systems (GIS) and remote sensing, IoT sensors and Supervisory Control and Data Acquisition systems for efficient operation and management.
- c) A Record Keeping System shall be enforced to list all the basic data of each piece of equipment and the history of the equipment.
- d) The reporting structure may be devised in two levels, i) day to day reporting of O&M and ii) submission of scheduled report at higher level for collation and analysis for decision making on regular bottlenecks, concerns with O&M, downtimes of schemes, response time, etc.
- e) Provisions should be made for sharing reports in O&M core team meetings and in Gram Sabha.
- f) Regularly perform audits of water and energy consumption, as well as financial assessments, ensuring accurate reporting and verification.

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