

12/07/2026

Puducherry

From,

Secretary,
Communist Party of India (Marxist),
Puducherry State Committee

To,

The Hon'ble Lt.Governor,
Lok Nivas,
Govt of Puducherry

Sir,

Subject: Technical Observation regarding Underground Drainage Pipe Specifications in Puducherry – Lack of professionalism and quality check leading huge waste of public money and resulting in huge public health dangers – Request for a complete revamp of the sewerage management system as well as storm water drainage – Reg.

This letter is specifically addressing the way lack of professionalism, work ethics, quality and cost control measures and overall lack of direction in urban planning in Pondicherry region is being done (or not done) with a specific example of how lack of technical integrity and long-term cost-efficiency of our public infrastructure.

We have observed in a few places that the HDPE pipes being installed are marked as IS 4984:2016 compliant. It may be noted that IS 4984:2016 is not the appropriate standard for underground sewage applications. The Bureau of Indian Standards explicitly designates this standard for potable water supply, raw water conveyance, and general-purpose water transport. Utilizing these pipes for sewerage systems presents both technical vulnerabilities and non-compliance. This leads to wastage of public funds, compromise on quality of drinking water as these pipes run along with sewerage lines underground. There are already cases reported where sewerage water has mixed with drinking water resulting in serious public health issues and outbreak of cholera related deaths last year.

Engineering Incompatibility: IS 4984 pipes are designed as solid-wall pressure pipes to withstand internal hydraulic pressure. Gravity sewers, however, require resistance to external soil and traffic loads (ring stiffness). Using pressure-rated pipes for a gravity flow project leads to unnecessary material expenditure without providing the specific chemical resistance required for raw sewage and H₂S gases.

Chemical Vulnerability: Unlike dedicated sewage standards, IS 4984 pipes are not evaluated for the chemical resistance necessary to withstand the corrosive environment of domestic sewage and industrial effluents.

Recommended Standards for Underground Sewage: For future and ongoing projects, we would strongly suggest ensuring that the pipes conform to the relevant Indian Standards specifically

designed for wastewater applications. IS 14333:1996 (High-Density Polyethylene Pipes for Sewerage): Specifically formulated for sewage and industrial effluents. These are ideal for gravity mains or pumping/rising mains where wastewater is actively pressurized. IS 16098 (Part 2): 2013 (Structured-Wall Plastics Piping Systems): These feature Double Wall Corrugated (DWC) HDPE pipes. With a corrugated outer wall for high ring stiffness and a smooth inner wall for hydraulic efficiency, this is the modern, cost-effective industry standard for underground non-pressure gravity drainage.

As pointed out, this raises serious questions for which we seek your immediate responses from those who are responsible.

1. How such a serious lapse has occurred in the first place? Who in PWD is responsible in creating technical tender papers and who does the crosschecking for standards?
2. Once a tender is issued, who is responsible for the fact that whether the contractor is using the materials as per the standards?
3. What quality check/assurance system exists for such works and is there proper documentation of these maintained and verified before payments are settled?

We are seriously also concerned in the adhoc manner in which such works are carried out with the complete lack of any master plan with technical specifications. For example, does Puducherry have a complete map of existing networks of the sewerage system, which locations are still not connected with the networks and also a technical audit of the existing networks and their health checked periodically?

We also note that it is a common practice that the LAD department is connecting public sewerage channels to storm water channels, irrigation channels, ponds, irrigation tank and rivers extensively in Puducherry. We demand that there is a concerted effort by all the line departments to immediately address this issue of deliberately polluting fresh water eco-systems which is a serious dereliction of duty.

We, from the Communist Part of India (Marxist) demand that a white paper on the above issues be placed in public domain. There is an immediate need for regular monitoring of parameters such as water quality, blockages in the existing networks (which can be mapped with cameras as is being used in other cities), mechanism for correcting bottlenecks in the existing sewerage networks before the onset of monsoon and a road map for addressing the lapses with a proper timeline.

We demand the PWD & LAD to immediately stop the ongoing civil works relating to underground sewage lines, institute an official enquiry into this utmost serious matter of public health and safety and take necessary actions.

Sincerely,

S. Ramachandran
Secretary
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Copy to:

Hon'ble Union Minister for Health & Family Welfare

The Chief Secretary, Govt. Of Puducherry

The Secretary (Works) Govt of Puducherry

The Secretary (Health), Govt of Puducherry

The Chief Engineer (PWD) Govt. of Puducherry