

**TOWN OF DEDHAM**  
**SEWER REGULATION**  
**REMOVAL OF SOURCES OF INFILTRATION**

**Definitions**

- Sewer Enterprise Fund – This fund is comprised of the revenues generated by the Town’s sewer bills. This fund is utilized to provide continued operation and maintenance of the utility and will be utilized to pay for the removal of private sources of infiltration by the Town when identified by the Town and consented by the owner.
- Stormwater – Water that originates from precipitation events, including snow and ice melt, and that absorbs into or flows over the surface of the ground.
- Wastewater – Water that has been affected by human use. For households, this includes water produced by toilet flushes, sinks, dishwashers, washing machines, bathtubs and showers.
- Infiltration – Water other than wastewater that enters a sewer system (including sewer service connections) from the ground (i.e. groundwater) through means that include, but are not limited to, defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.
- Inflow – Water other than wastewater, typically stormwater, that enters a sewer system (including sewer service connections) from sources that include, but are not limited to, sump pumps, roof leaders, yard drains, area drains, drains from wetland areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, or drainage. Inflow does not include, and is distinguished from, infiltration.
- Sewer service – Disposal pipe that conveys wastewater from a building to the Town of Dedham’s sewer main or manhole in the street. The entire length of the sewer service, from the basement to the connection with the sewer main, is the responsibility of the property owner.
- Pipe Lining or Line – Minimally invasive process which allows the rehabilitation of existing sewer services without having to dig up the ground (trenchless technology) by inserting an epoxy saturated felt tube into the service, inflating it with air and curing it with heat to create a new jointless service within the existing defective service.

**Applicability**

- This Regulation shall apply only to residential properties with four residential dwelling units or less and that are connected to the Town’s sanitary sewer system.
- Nothing in this regulation shall be construed as relieving any other property owners from having to comply with the Town’s sewer use regulations or to remove sources of infiltration & inflow in private sewer lines when ordered to do so by the Town.

## **Statement of Authority and Purpose**

- This Regulation is enacted by the Town Manager pursuant to the authority set forth in Section 229-2 of the Town's General Bylaws relative to the administration and operation of the Town's Sanitary Sewer System and section 12.0 of the Town of Dedham Sewer Regulations, as last amended on September 19, 2013.
- All sewer connections must conform to the latest version of the Town of Dedham's Sewer Use Regulations and are subject to inspection at any time. Authority to implement the Sewer Use Regulations lies with the Dedham Director of Engineering (Director).
- As with most older sewer systems, the Town of Dedham's system has a significant problem with infiltration of clean groundwater entering the system through defective pipes, joints, connections and manholes. Although this clean water does not require treatment, the Town's sewer users are paying significant sums to treat water entering the system through infiltration. For example, in FY2019, the Town transported an average of 3.5 million gallons per day to the Massachusetts Water Resources Authority for treatment. Dedham's assessment for this flow was \$5.6 million, which is passed on to sewer users through the assessment of sewer user fees. Infiltration and inflow (I/I) not only result in higher flows to the Wastewater Treatment Facility but also takes up valuable sewer capacity and adds unnecessary wear and tear to the sewer system. Increased volume within the sewers caused by I/I can also lead to overflows into streets, rivers, streams and basements.
- Reducing infiltration is beneficial as it keeps more water in the ground to recharge our aquifers.
- In FY2019, only 52% of the Town's sewer flow was comprised of sanitary sewage requiring treatment. The remaining 48% was comprised of infiltration (37%) and inflow (11%). Thus, it needlessly costs the Town approximately \$1.6 million dollars per year to treat clean groundwater entering the system through infiltration.
- Over the past several years, the Town has engaged in a program to remove sources of infiltration from the system by using video cameras to inspect lines in the public ways. This program allowed the Town to find where the infiltration was coming from and to repair or replace leaking pipes, joints and manholes. As a result of this effort, a significant volume of clean water has been removed from the system.
- Despite the Town's efforts to eliminate sources of infiltration from the public sewer lines, infiltration remains a significant problem due to aging pipes that connect private properties to the public sewer. The purpose of the Private Infiltration Removal Regulation is to ensure that all buildings are properly connected to and not contributing infiltration to the sanitary sewer system by establishing a system for inspection and repair of private sewer lines. Homeowners who cooperate in this effort will bear no additional cost for inspection or necessary repairs. However, because this is such a serious problem, those who refuse to cooperate will be assessed fees to cover the Town's costs in removing sources of infiltration from their properties.

## **Private Infiltration Removal Regulation**

### **Step 1 - Identification of Private Infiltration Sources**

- The Director periodically conducts video sewer service inspections throughout the Town of Dedham to identify sources of infiltration on private property.

- The Director through his authorized agents and/or contractors will inspect private sewer services by running a camera down the service from the Town's sewer main or manhole in the public way and/or utility easement to a distance of 100 feet or to within 10 feet of the building foundation, whichever comes first.
- **This is a non-invasive inspection**, which will not require excavation or entry onto private property. Property owners will not be informed that the inspections are taking place and will not be asked to curtail their sewer use during the inspection.
- **Property owners will not be assessed a fee in connection with the inspection.**
- Once the inspection is complete, the video footage will be reviewed to determine whether the service contains any sources of infiltration that can be eliminated through repair, lining or replacement of all or any portion of the private sewer service. Video footage will be available for review upon request.
- The determination of whether to inspect a particular line shall be at the sole discretion of the Director and the Town will not honor any requests to conduct inspections that have not been scheduled by the Director as part of this infiltration removal program.

Step 2 - Notification of Infiltration Source

- If a source of infiltration is found in a sewer service, the Director, in his sole discretion, will determine whether the matter should be further investigated with an inspection from the street or on the property or whether the sewer service should be repaired, lined, replaced or relocated. Nothing in this regulation shall be construed as conveying upon any property owner a right to repair, lining, relocation or replacement of a sewer service and the Director reserves the right to refuse to conduct any work on a private line and to order the property owner to take any action necessary to repair, line, replace or relocate their private sewer line.
- If the Director determines that the Town will remove the source of the infiltration, the property owner will be sent a notice which describes the source of the infiltration and the work required to eliminate it, which may require further inspection from within the property and/or relocation of the existing sewer service. The notice will be sent by Certified Mail to the same address that sewer bills are sent to.
- The notice will include a Right of Entry and Release Agreement which must be filled out and returned to the Town within **sixty (60) days** of receipt of the notice. Through this agreement, the property owner will be required to give consent to the Town to enter the property for the purpose of further inspecting, repairing, lining or replacing the sewer service.
- Any property owner who does not return the agreement within the required **sixty (60) days**, will be sent a second notice, providing that the owner will have an additional **thirty (30) days** to return the form.
- Property owners who do not return the agreement within the original sixty days will be assessed a late fee of **one hundred dollars (\$100.00)** each quarter until the agreement is received by the Town.
- Any property owner who does not return the agreement within **ninety (90) days** of receipt, will be subject to additional penalties, including but not limited to issuance of an order requiring the property owner to remove the source of infiltration at their own expense.

### Step 3 – Removal of Infiltration Source

- Upon receipt of a signed Right of Entry and Release Agreement, the Town will work with the property owner to schedule a time to further inspect, repair, line or replace the sewer service, at no additional cost to the property owner.
- Upon completion of the work, the Town will use reasonable efforts to restore any area disturbed by the work to its original condition, as nearly as reasonably possible.
- Upon completion of the repair or replacement, the property owner must acknowledge ownership of the sewer service following a 1-year warranty provided by the Town upon completion of the repair or replacement.
- The Town or its contractor will provide a limited warranty that the work is free from defects in workmanship and materials, under normal residential use, for a period of one year from the date of completion of the work. During the warranty period, the Town or its contractor will repair or replace any defect in material or workmanship which is attributable to the work; provided, however, that this limited warranty will only apply to repair or replacement of defective work and it will not apply to any other damage or defect which arises from any other cause, including but not limited to: acts of God, weather, property conditions, actions of third parties, improper use, or any other cause. Any warranty will be limited to repair or replacement of the defective work and no other warranties will be provided.
- The method of removing the source of infiltration from the private sewer service shall be at the sole discretion of the Director.

### **Enforcement**

- Any person who fails to comply with an order issued pursuant to this Regulation may be subject to enforcement action by the Town, which may include but not be limited to: termination of sewer service, an order requiring the property owner to undertake the work at their own expense, and/or the assessment of a civil penalty of up to \$5,000 for each violation.

### **Severability**

- If any provision of this Regulation is declared invalid or unenforceable, the other provisions shall not be affected thereby but shall continue in full force and effect.