

## THE AUTHORITY:

The Municipal Authority of the Township of South Fayette is a non-profit utility providing wastewater collection and conveyance services for our customers. Accordingly, your rates and charges are a direct result of the costs we incur to provide YOU service. The “wastewater” portion of your bill from Pennsylvania American Water Company reflects your proportionate cost for this service.

## THE SOUTH FAYETTE TWP. SANITARY SEWER SYSTEM:

- ◆ Construction of the system began in 1973 and currently consists of nearly 120 miles of public owned sewer mainlines, with approximately 5,650 customers connected to the system. It is estimated that the private portion of the system adds another 100+ miles of pipe.
- ◆ The system collects and transports sewage to the Allegheny County Sanitary (ALCOSAN) plant in Pittsburgh for treatment. The majority of the flow to ALCOSAN is via the Chartiers Creek and Oakdale pump stations.
- ◆ Typical public owned collection lines are 8” in diameter which connect to 10”, 12” and 15” trunk lines. The largest sewer in the SFMA system is only 27” in diameter. Also, the Authority is generally responsible for maintaining lateral sewers within public right of way. (See sketch on back portion of this brochure)
- ◆ Is it undersized ? NO! ...The fact is our system operates very well in all but the most extreme precipitation events. On those rare occasions the cause is simple: **STORM WATER ENTRY TO THE PIPES**



- ◆ During severe storm events, the additional water being added to the pipe network can exceed the pipe capacity resulting in overflow conditions. This storm water and ground water entering the system inappropriately is referred to as **Inflow and Infiltration or I&I**.

## SFMA’s REGULATIONS PROHIBIT:

“..... any storm water, ground water, roof run-off, subsurface drainage” to enter the sanitary sewers. The regulations also require that customers properly maintain building sewers.



## THE PROBLEM:

The additional storm water, which can result in system overflows can:

- ◆ Lift manhole lids, allowing for sewage to overflow into streets, walkways and yards.
- ◆ Activate overflow pipes that discharge sewage into storm sewers and streams thereby violating Federal (EPA) and State (PaDEP) and County (ACHD) regulations.
- ◆ Cause basement flooding from back-up of the sanitary sewer lateral. This flooding can cause extensive property damage and presents an unnecessary health hazard.



A single 8” sewer pipe, at a minimum 0.5% slope, can accommodate the sewage flow from 600 households. But, that same pipe can be overloaded with I&I from as few as 40 properties.

- ◆ SFMA, along with all other communities connected to the ALCO-SAN system, is currently operating under an Administrative Consent Order (ACO) from the Pennsylvania Department of Environmental Protection (PaDEP) and ACHD which stipulates that we **must “rehabilitate” the system to accomplish 2 primary goals”**:
  - ◆ Prevent future overflow occurrences throughout the system.
  - ◆ Prevent future occurrences of basement flooding attributable to the sanitary sewer system.
- ◆ If your property is introducing any amount of I&I into the system you are directly contributing to the problem. Studies have shown that 50% to 80% of I&I originates within the private sector.

## SOLUTIONS:

### ACCOMMODATE THE FLOWS:

- ◆ Reconstruct parts of the system by installing larger and/or additional sewer lines and increasing the capacity of pump stations.
- ◆ Construct holding tanks to temporarily store the excess flow which is then gradually released back into the system.
- ◆ Pursuing options such as these, thus creating an oversized sewer system, would substantially increase your sewer bill. They are not considered to be the best initial alternatives to be undertaken.



### REDUCE THE SOURCES OF I/I: (SFMA’s preferred approach)

- ◆ To date, SFMA televised nearly 70% of the 120 miles of sewer mains attempting to locate system defects that could allow I/I to enter the system.
- ◆ SFMA representatives have just completed a system wide property inspection program (as mandated by our ACO) in search of obvious inflow sources such as downspouts, area drains, etc.
- ◆ By May 2007, SFMA personnel must complete inspection of over 2,400 manholes throughout the system.
- ◆ As defects are identified as a result of the above activities, repairs are being made by relining the pipe, grouting the pipe joints, and when necessary, excavating and replacing the pipe. Likewise, manholes are being repaired as required.

### CUSTOMER: (HOW DOES THIS IMPACT YOU?)

- ◆ If SFMA has notified you of a defect for downspouts, low vents, area drains, etc. identified during the recent inspection program, please make the repairs in a timely manner.
- ◆ **Effective June 1, 2007**, SFMA will mandate that sanitary sewer laterals leading from buildings to the sewer main be televised as part of any property transfer. This work will generally be done by SFMA personnel in addition to the current dye test program required at the time of sale. Defects and leaks identified during this process will require the property owner to either replace or reline the privately owned portion of the lateral as a condition of sale. SFMA will be responsible for replacing or relining pipe that is deemed to be in the public portion of the system.

South Fayette Twp.  
Municipal Authority  
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**UPCOMING POLICY CHANGES MAY  
IMPACT YOUR PROPERTY**

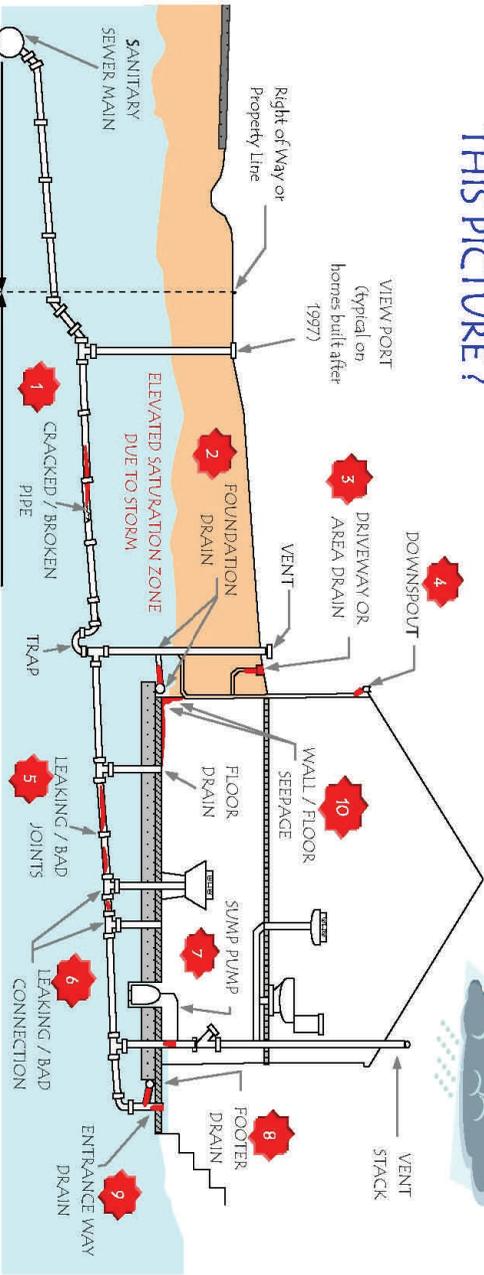
To find out how new regulations affecting sanitary sewer laterals may impact you, please read this information

[www.authority.south-fayette.pa.us](http://www.authority.south-fayette.pa.us)

**OFFICIAL NOTICE**



**WHAT'S WRONG WITH  
THIS PICTURE ?**



**CAN YOU SPOT ALL THE SOURCES OF UNPERMITTED (ILLEGAL) DRAINAGE OF STORMWATER AND GROUNDWATER POSSIBLE AT YOUR HOME ?**

(10 OF THE MOST COMMON ARE SHOWN ABOVE) ANSWERS SHOWN AT MARGIN

- ANSWERS:**  
1. CRACKED / BROKEN PIPE 2. FOUNDATION DRAIN 3. DRIVEWAY OR AREA DRAIN 4. DOWNSPOUT 5. LEAKING JOINTS 6. LEAKING CONNECTIONS 7. SUMP PUMP DISCHARGE 8. FOOTER DRAIN 9. ENTRANCE WAY DRAINS 10. WALL / FLOOR SEEPAGE OR FLOW ARE ALL UNPERMITTED SOURCES OF ILLEGAL DRAINAGE



**COOPERATION:**

*There must be a joint effort by the customers and SFMA to remove sources of I&I from entering the Sanitary Sewer System.*

- ◆ The cost you pay for wastewater services is primarily based upon your water usage rather than the amount of wastewater that you contribute to the system. However, SFMA's agreement with ALCOSAN limits the amount of wastewater that can be conveyed to them without incurring a surcharge. This surcharge amount has been as much as \$395,000 in a single calendar year. Therefore, everyone's bill is impacted in order to cover those costs.
- ◆ A single leak of 2 gallons per minute can result in a \$260 surcharge per month that must be escrowed by the Authority to be used for system repairs that are intended to reduce flow.
- ◆ If you know or think you may be contributing to the problem, let's FIX IT. Visit our web site at [www.authority.south-fayette.pa.us](http://www.authority.south-fayette.pa.us) for more information or contact our office at 412-221-1665.

If 30% of SFMA's customers are contributing I&I, that equates to 1,695 properties. At just two gallons per minute per property, that amounts to excess flows of more than 4.9 million gallons per day, or 3X the normal "dry day" flows. In reality, the peak flow in the SFMA system has been recorded during severe storm events to be as much as 6X the normal flow.



**LET'S ALL DO OUR PART. AS A COMMUNITY WE CAN PROTECT PROPERTY, PREVENT HEALTH HAZARDS, AND MAINTAIN REASONABLE WASTEWATER BILLS!!!**



*Our thanks to Highland Sewer & Water Authority for base brochure design.*