Frequently Asked Questions – Sanitary Sewer Remediation

The City of Fort Smith ("City") has entered into a Consent Decree with the Environmental Protection Agency (EPA). Below are a list of Frequently Asked Questions (FAQ's) about the Consent Decree and associated work.

1. **What is the Consent Decree?**

   The Consent Decree is an agreement between the City of Fort Smith and the EPA to reduce the amount of untreated sewage being inadvertently discharged from the sanitary sewer collection system into public waters of the United States (i.e., rivers, streams, etc.)

2. **What is causing untreated sewage to be discharged?**
   Sanitary Sewer Overflows (SSO's) are unintentional releases of sewage/wastewater from the public sanitary sewer collection system. SSO's occur because of a variety of reasons, including:
   - Accumulation of FOG (Fats, Oils, and Grease), solid materials, or roots within sewer lines
   - Defects in sewer pipe lines, service lines, and manholes
   - Undersized sanitary sewer lines
   - Mis-aligned joints

3. **What are some of the types of defects in sewer lines?**
   There are a variety of defects that can occur in sewer lines. These include:
   - Cracks, breaks, fractures
   - Holes
   - Deformation
   - Collapsed lines
   - Misaligned/eroded joints and gaskets

4. **What causes defects in sewer mains, service lines, and manholes?**
   Defects in sewer mains and service lines can result from a variety of issues. These include:
   - Tree roots growing into main lines
   - Old pipe and manhole materials degrading over time
   - Ground movement (i.e. as a result of heavy traffic nearby)
   - Joint displacement from ground settling
   - Joint sealant materials (gaskets, mortar) cracking, breaking, or eroding away
   - Careless construction practices (i.e., rocks in trench)

5. **How does groundwater get into the sewer system?**
   Infiltration is the term used for groundwater entering sanitary sewers through pipe and manhole defects. Inflow is water that is dumped into the sewer system through improper connections (ie., sump pump), or enters the sewer from above-ground sources (i.e., leaky manhole covers, or sewer service caps). Inflow primarily occurs during rain events. Infiltration and Inflow (I&I) are considered "clean water". I&I water does not have to be treated prior to discharge into public waters (rivers, lakes, etc.).

6. **Why are Infiltration and Inflow a problem?**
   Infiltration and Inflow (I&I) cause two main problems in the sanitary sewer collection system:
   1) I&I requires larger sewer main pipelines to handle the additional water volume
   2) I&I requires larger wastewater plant capacity to treat the additional water volume

   Larger pipelines and wastewater plants are more expensive to install and maintain. Reducing the volume of water in the sanitary sewer collection system saves money.

7. **Why are some sanitary sewer lines undersized?**
   Undersized sanitary sewer lines are typically a result of growth and development surpassing the original sewer design capacity. Infiltration and Inflow (I&I) can also contribute to water volumes, which requires pipe upsizing.

8. **How do sewer lines become clogged?**
   Sewer lines often become clogged with solid debris. These debris can result from:
   - FOG (Fats, Oils, and Grease) solidifying and sticking to sewer walls
   - Tree roots trapping solids within the pipeline
   - Illegal dumping of solids and chemicals
   - Collapse of sewer main lines

9. **How is the City of Fort Smith fixing the sanitary sewer collection system?**
   The City of Fort Smith is approaching the Consent Decree using various methods, including:
   - Cleaning and visual assessment of sewer line and manhole conditions
   - Identification of sewer lines to be repaired, replaced, or upsized
   - Operational programs to extend the life of existing sewer lines

10. **How is the City of Fort Smith repairing or replacing broken sewer lines?**
    Sewer lines can be repaired using a variety of methods, including:
    - Open trench replacement (dig the old pipe out, put the new pipe in)
    - Pipe bursting (pulling a new pipe through the old pipe)
    - Cured-in-Place Pipe (CIPP) (lining the old pipe with new coating)
    - Point repairs (any of the above methods, applied only to a small section)

11. How is the City of Fort Smith of Fort Smith repairing or replacing broken manholes?

Sewer manholes can be repaired using a variety of methods, including:

- Open trench replacement (dig the old manhole out, put a new manhole in)
- Lining (coating a manhole to repair defects)
- Fiberglass insert (placing a new manhole inside the existing manhole)
- Grout/Cement Repair (coating holes/cracks in manhole)

12. How will I be impacted by sanitary sewer collection system work?

Citizens can expect to see construction work around their property. This may require utility workers to enter onto their property. Sewer service line connections to the public sewer main will be replaced to the edge of the property line, and a clean-out installed. While your service line is being replaced, you will be asked to abstain from flushing your toilet, washing clothes/dishes, showering, or any activities that use your sewer service line. Your service line will not be out of service longer than 8 hours, from 8am to 6pm.

Clean-outs are small tubes that allow your service line to be located and cleaned.

In extreme cases, fences, trees, mailboxes, driveways, or other structures may need to be temporarily removed to perform the work. These items will be paid for, and/or replaced, depending on the situation in question. If your property will be impacted in this way, a representative of the City of Fort Smith or a Contractor hired by the City of Fort Smith will contact you prior to the work starting.

13. What can I do to help minimize Sanitary Sewer Overflows and the repair work associated with the Consent Decree?

As a citizen, there are many ways you can help to minimize SSOs and sewer repair work. These include:

- Maintaining your sewer service line to the edge of your property, to minimize leaks
- Disposing of solid waste in the garbage, rather than utilizing a disposal
    - This includes food, baby wipes, paper towels, feminine products
- Disposing of Fats, Oils, and Grease (FOG) in the garbage

14. What do some of these items look like?

Figure 1. Open Cut Pipe Replacement

Figure 2. Pipe Burst Replacement

Figure 3. Manhole

Figure 4. Sewer Clean-Out and Service Line

Figure 5. Cured-In-Place Pipe

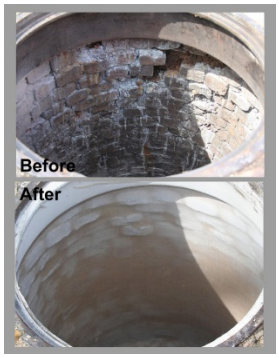

Figure 6. Lined manhole