



SOUTH ARAPAHOE SANITATION DISTRICT

Centennial • Greenwood Village • Littleton • Unincorporated Arapahoe County

TO: Customers
South Arapahoe Sanitation District

FROM: Jennifer Chipman, P.E.
Kennedy/Jenks Consultants

SUBJECT: Sewer Service Rehabilitation and Maintenance

As the consulting engineer for South Arapahoe Sanitation District (SASD), Kennedy/Jenks Consultants (Kennedy/Jenks) is familiar with the various problems related to sanitary sewer service lines. These problems can include root intrusion, grease, holes and cracks in the pipe, separated or offset joints, and sags due to ground settlement.

Although the maintenance and repair of sewer services in SASD are the sole responsibility of the property owner, the District has put together this informative memo so that you may be more familiar with the types of problems that can occur in your service, and what you can do to fix them or try to prevent them.

The most common problem that is reported to the District from its customers is tree **roots** growing into the service line. Of the 110 miles of pipe in SASD, about two-thirds are made up of clay or concrete, which is highly susceptible to root intrusion (newer areas have plastic pipe for sewer services). If a customer is having problems with their sewer service, i.e. sewer backups, this could be due to root intrusion. If you feel that you have root intrusion, you may want to take the following steps:

Line Maintenance and Inspection

Root Sawing and Treatment - The first step would be to have your line root sawed and, if you wish, chemically treated. Sawing is a mechanical process that involves a spiral shaped saw blade that conforms to the inside diameter of the pipe to cut the tree roots. Since these roots are similar to other deciduous plants or tree forms, the roots typically multiply, or grow back in a larger volume. Another option, therefore, is to treat the roots with an herbicide. Generally, these chemicals do not damage the tree, but rather retard root growth. These products, which are sold at hardware stores, are generally effective for a one-year period and must be reapplied on an annual basis.

TV/Video – If problems still exist after root sawing your service line, then the second step would be to have your service line visually inspected. Visual inspection of service lines is available through current technology to locate problems within the lines. This process involves the insertion of a mini camera through a floor drain or cleanout to visually inspect service lines between the residence and the main line. Visual inspection of your service line may identify **broken pipe, sags due to settlement, separated joints, or deterioration.**

Line Rehabilitation

Line Replacement – Upon investigation of your service by visual inspection, you may find that your problem is from sags due to settlement, broken pipe, separated joints, or deterioration. In this case, you may need to replace portions or all of your service line. Plastic pipe is now generally used in all new construction of sewer services. This pipe is manufactured in longer lengths than the older clay or concrete pipe. Fewer joints mean less potential points of root entry.

Pipe Bursting – This minimal excavation method may be an option for line replacement if the problem is roots, cracked pipe, broken pipe, or a minimal sag. This method involves digging an access pit at each end of the damaged pipe and running a pipe-bursting tool through the existing pipe which then pulls the new pipe into place.

Pipe Lining – This lining technique may be an option if there are no sags in the damaged pipe and if any breaks or separated joints are not too severe. This rehabilitation method usually requires minimal digging. A resin-saturated felt tube is inverted or pulled into the damaged pipe. Then hot water or steam is used to cure the resin and form a tight-fitting jointless replacement pipe. This technique does slightly reduce the diameter of the pipe. However, it can be less expensive than traditional line replacement due to minimal or no excavation. The following contractors perform pipe lining of sanitary sewer lines in SASD.*

Contractors

The following contractors have performed some, or all, of the services described above in SASD. **This list of contractors is not intended to be an endorsement or recommendation on the part of Kennedy/Jenks or the District, but only suggestions for consideration. Contractors must notify Kennedy/Jenks at 303-985-3636 at least 48 hours prior to line rehabilitation.**

Contractor	Phone Number	Root Sawing and Treatment	TV/Video	Line Replacement	Pipe Bursting	Pipe Lining
Anthony's Plumbing	303-973-7893	X	X	X	X	X
Apex Plumbing	303-215-1348		X	X	X	X
ARS Rescue Rooter	720-278-2141	X	X	X	X	X
Elite Pipe MD	720-351-8883	X	X	X	X	X
Plumblin Services	303-436-2525	X	X	X	X	X
Premier Excavating	303-210-9745	X	X	X	X	X
Stone and Concrete	303-287-0889	X	X	X	X	X

Please note that most homeowners' insurance policies do not cover damage related to service line or main line sewage backups. It is recommended that you check with your insurance carrier to find out if this coverage is included in your policy, or if you can have it added.

If you have any questions regarding your sanitary sewer service, or South Arapahoe Sanitation District, please feel free to call me at 303-985-3636.