

Benefits of sanitary sewer line cleaning – and avoiding lawsuits go hand in hand

There are many benefits for routine cleaning of sanitary sewer lines. They include providing satisfactory service to ratepayers and also, to avoid damage claims from backups.

I recently read an article in the *Topeka Capital-Journal* online (www.cjonline.com) about a city that had a lawsuit filed against it for more than \$48,000 for damages due to sewage backup on two properties owned by the same couple. The time of the loss was reported as being in March 2007. The suit was only being settled in August 2009. The suit was for a backup of sewage on an 8-inch lateral that had become blocked by grease. The article commented that the lateral line had previously shown grease blockages and the city did increase the maintenance schedule to address those blockages. The direct quote from the article was: “However, during 2006 and 2007 the city was or should have been aware that its maintenance program was insufficient due to the characteristics of the line and the surrounding area leading to an endemic grease blockage problem.” A mediation settlement was reached for \$24,000 between the property owners and the city.

Ned Peters (in gray shirt), operator at the city of Palmer in northeast Kansas, discusses the line to be cleaned with the city of Marysville’s Kevin Evenson (yellow/green shirt) and Delmar Gross. The line was cleaned due to a blockage. Marysville provided the service at a minimal cost to Palmer. Total time to and from including the cleaning was about 2.5 hours. Marysville, for example, charges for hours by staff and machine use as there are other providers to do regular cleaning.

Liability insurance and damage claims

Most wastewater systems purchase liability insurance to be protected from damage claims such as that described above. Insurance companies in turn can increase the rates; the deductible is often increased by the utility if too many claims result in increased premium. Recently, I visited with one city superintendent to further discuss the cost of liability insurance and potential damage cases. The town has a regular maintenance program for its

wastewater system and it carries out that program. The cost of the liability insurance is \$528 annually; the city’s policy has a \$2,500 deductible. Depending on the size of the utility, that cost is quite inexpensive. In that town, if there is a claim against the city for damage due to sewage backup, the town’s water/sewer committee meets with the customer to try to reach a settlement. If no agreement can be reached, the issue is brought before the entire city council. The wastewater utility also documents any backups with written records and video or photographs before the line is cleaned in case of later litigation over the incident. I believe photos provide excellent evidence in determining loss in damage claims. If any real property such as furniture is included in the claim, the city has a right to that property since it has been paid for by the claim. Making this known to the public has resulted in a reduction of the

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amount of the claims. The city also provides information to the customers about the city's policies regarding damage claims.

Photos of the upstream and downstream manholes are also beneficial. Such photos can prove or disprove fault by the wastewater utility. I have seen where a customer in the middle of block files a claim when no one on either side on same line has experienced any problem, and the service lines are close to same depth. The result is that having photos of the manholes almost always proves that the problem was with the customer's facilities and not the wastewater utility.

I visited with several other systems when preparing this article. One small system of almost 800 people uses a trailer-mounted jet rodder to clean their sanitary sewer system. The operator cleans the entire system every two years, or an average of two-days a month during the months of March through September, depending on when time allows. He also cleans the "trouble spots" at least every 90 days.

Another system also has a jet rodder, but due to staff reductions, that city is going to contract the work to one of several companies in the state that provide cleaning services. By using contract service providers, a utility can schedule work as needed. Most systems opt for cleaning one-third of the system per year; they clean the trouble spot annually. With this type of service, it allows the utility's operators to perform other needed work; most operators have work responsibilities beyond the wastewater system. For many smaller systems, usually less than 3,000 in population, contracted services work out well. There are several larger systems that use contracted cleaning services. However, it is not as common for larger systems to contract for such services as it is for smaller utilities. The utility also gains more control over budgeting by



This photo shows a small bundle of tree roots that were dislodged during a cleaning project and which subsequently created a blockage in a sanitary sewer line.

contracting for services. Let's assume, for example, that a system has 75,000 feet of line, with the goal of cleaning 25,000 feet per year. By bidding the service out, the wastewater system will know well in advance the costs; rates can be adjusted to meet all the needs. Contract services also generally

provide closed circuit TV (CCTV) work within the scope of the project. Typically about 10 percent of the line cleaned will be videoed. The result is that over a 10-year period, the entire system can be videotaped. The cost for these services varies depending on the amount and size of lines to be cleaned. These contractors will also provide emergency service, but due to distances may not be feasible for some systems.

Two systems I recently visited have been using contracted cleaning services. One has been using it for 20 years; that community has had only two blockages and one claim during that time. The other system has been using the service for 14 years and hasn't had blockage for eight years; that problem was caused by some roots that were broken loose during the cleaning process and stopped a line downstream.

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Document the process

All cleaning procedures should be well-documented. Remember to record who, what, where and when. In a utility that has its own cleaning equipment, a simple spreadsheet may be the format to log all the work. Those systems contracting services should also log the work that contractors perform. Some of the information needed to adequately document a complaint includes: the date, time and name of the person calling in the complaint; who took the call; who responded and at what time; what was found to cause blockage; what damages resulted; what was the location; where was the problem found in the line (e.g., 300 feet east of manhole A-1); also was the blockage reported to the Kansas Department of Health and Environment. (Refer to my article in the July 2009 issue).

Here is a sample report of an emergency:

John Smith at 123 Oak Street, called city hall at 12 p.m., May 1, 2009; call received by city clerk Jane Doe; Mr. Smith reported sewage coming into his basement through the floor drain. He

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stated his basement was full of sewage. Bob Barker, Wastewater Supervisor, responded to the location at 12:05 p.m. arriving at 12:15 p.m. on May 1. Barker inspected the upstream and downstream manholes and dispatched utility worker Jeff Moore with a sewer jet rodder to clean the main line as a backup had occurred. Photos were taken of Mr. Smith's basement while awaiting arrival of the jet rodder; onsite inspection and photos indicate that sewage was within six feet of the floor drain. Jeff Moore arrived at 12:30 p.m. and began cleaning the line from manhole A-1 east; a blockage was encountered at approximately 300 feet.

A basket was lowered prior to the start of the cleaning; roots were caught in the debris basket. The line appeared to drain; sewage drained from Mr. Smith's basement; the city's crew assisted with the clean-up. A CCTV camera was used and found a broken service tap that appeared to be for 124 Oak. A report was faxed to KDHE as required.

Reports such as above can be completed on prepared formats for ease of logging of information; always however, allow ample space for a full explanation.

The response

Now that the city in this case knows there is a problem with the tap, the city needs to either have the owner at 124 Oak repair the tap or the city repairs the tap, depending on who is responsible for the taps in the system. But since it is now a known problem, this line should be checked regularly, at least weekly and cleaned as needed until repairs are completed. If a backup occurs again and repairs are not made, the cost could result in a high cost lawsuit. But with a good faith effort to repair the problem, such as in the next week, the city is: 1) completing its responsibilities; and, 2) less likely to lose a damage claim to the homeowner.

Again I cannot stress enough the importance of having a schedule to complete line cleaning. In the above scenario, if this line has not been part of regular maintenance schedule, a lawsuit could still happen, and the loser will more than likely be the utility system.

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