

Collection System Backups: Reporting Requirements & Management Options

By Mike Lucas, Wastewater Technician

“Your sewer main just backed up into my finished basement! I lost irreplaceable, priceless family heirlooms! The City is going to pay for this! If this happens again you will personally be cleaning it up!”

If you haven't received a call similar to this then chances are you will. These calls seem to come most often at night, on weekends and on holidays. As operators we know that we cannot prevent all collection system backups but that customer with the flooded basement generally doesn't understand that fact and is extremely unhappy to say the least. These are very uncomfortable and emotion-filled events that cost everyone in both dollars and respect.

In this article we are going to discuss the backup reporting requirements for your system to be in compliance with the NDEQ and some management options that we have.

Following is the latest information that I have regarding notification requirements:

A. Immediate Reporting

The permittee shall report to the Director any overflow that may endanger health or the environment from a sanitary sewer or any unauthorized overflow from a combined sewer over which the permittee has ownership or operational control. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances.

1. At a minimum, the report shall identify:

- a. The location of the overflow;**
- b. The receiving water (if there is one);**
- c. The duration of the overflow; and**
- d. The estimated volume of the overflow**

2. An overflow is any spill, release or diversion of municipal sewage, including:

- a. An overflow that results in a discharge to waters of State (other than a combined sewer overflow that is authorized by a permit); and**
- b. An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the State.**

B. Written Reports

The permittee shall also provide a written report to the Director for any overflow identified under paragraph (A) within 5 days of the time the permittee becomes aware of the circumstances. The written report shall contain a description of:

- 1. The location of the overflow;**
- 2. The receiving water (if there is one);**

3. An estimate of the volume of the overflow;
4. A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
5. The estimated date and time when the overflow began and stopped or will be stopped;
6. The cause or suspected cause of the overflow;
7. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
8. If reasonably made, an estimate of the number of persons who came into contact with wastewater from the overflow; and
9. Steps taken or planned to mitigate the impact(s) of the overflow.

C. Sampling

The overflow should be sampled for Carbonaceous Biochemical Oxygen Demand, Total Suspended Solids, pH, Ammonia and e-coli. Sample results should be submitted to the Department upon receipt of the analytical results.

I would suggest that you may find this as part of future permits. A violation then would be of your NPDES permit. Times have certainly changed.

Operators know that often times in the real world “cause” is not that easily determined. Was it a lack of main maintenance, was it unacceptable items introduced into the main, was it a service line obstruction or did the customer have their service line rodded and the roots were pushed into the main causing a system backup? Often times root infiltration happens at the service line tap into the main. What is your City/Village policy? Is the customer responsible for the tap and if so, is the customer aware of that policy?

Document! Document! Document! I would suggest that you have a formal written maintenance program which details a regular collection system schedule to completely clean your mains within a specified number of years (suggest 3 years). Evaluate problem areas utilizing video inspection. Regularly replace old or damaged mains. Document everything including your routine maintenance and repairs in your O & M file. Take photographs and then take some more photographs. If you have a backup that you determine not to be from your main that should also be documented. Be sure to always document names, dates, time, addresses and any other relevant information.

Communicate! Communicate! Communicate! Regularly publish contact numbers for your emergency responders. Develop a public information program to inform your customers how they can help to prevent collection system backups into their homes and those of their neighbors. I have examples of bill stuffers that might help you in these areas. Don't forget to communicate with your elected officials and/or appointed supervisors also.

It is our public responsibility to reduce the frequency of these problems to the best of our ability and certainly within the limitations within which we serve that same public. As an operator our survival may depend on it.

As I complete this article I can't help but think of the victims of the Boston bombing. It sort of puts things in perspective, doesn't it?