

INTRO TO CMOM (sort of)

By Steve Grimm

CMOM is coming! Are you ready? Do you know what to do? What's expected of you? Don't feel bad, no one else knows either. I've sat in on several training sessions dealing with CMOM and I don't know any more now, than I did when I first began. Capacity Management Operation and Maintenance. What's it mean? Maintaining your collection system. Limiting and/or eliminating SSO's. I won't get into the nitty-gritty of CMOM yet because I don't have all the facts. I will get into the limiting/eliminating SSO's, because that is something "WE" can and do work on every day. "WE" are always looking for that elusive source of extra flow during a rain event. That illegal hook-up (sump pump, floor drain, etc.), the storm sewer tied into the sanitary. All this extra flow could lead to an SSO, and needs to be eliminated. This is a part of CMOM. Eliminating sources of inflow and infiltration. Smoke testing is a very effective way of identifying illegal hook-ups. Once illegal hook-ups are found, public relations becomes key. One of the best public relations fact sheets I've found dealing with illegal hook-ups is the WEF Fact Sheet entitled "Stop Sewer Backups, How to Safeguard Your Home and the Environment by Disconnecting Downspouts". I suggest this fact sheet be included in any mailings sent to residents found to be in violation.

Stop Sewer Backups

How to Safeguard Your Home and the Environment by Disconnecting Downspouts

Connected downspouts--what are they?

Many older homes, especially in cities, have gutters connected directly to the sanitary sewer. This means that rain from the roof runs directly into the sewer. Not all downspouts are connected to the sanitary sewer, some may empty into a storm drain. Call your local sewerage authority or public works department to find out if your connected downspout empties into the sanitary sewer.

Why is this a problem?

The problem is too much water. Sanitary sewer systems can only handle a certain amount of water. During a rainstorm, water gets into the sewer from connected downspouts and other sources. When there is too much water for the system, the excess has to go somewhere, and that somewhere is often somebody's basement, a manhole, or a nearby creek or river. Municipalities have a legal requirement to stop water from overflowing out of sewers. Even if the water does not overflow, it's still a problem, because the wastewater treatment plant has to treat the extra water.

Why should you care?

Sewage overflows are messy, costly, and a threat to health and the environment.

Cleaning house. When there is a sewer backup into a house, the homeowner may have to pay the cost to clean up, repair damage, and replace ruined carpets and furniture. Basic homeowner's insurance often does not cover this damage (unless the policy has an added clause or "rider").

Health. Raw sewage contains microorganisms that can cause diseases such as hepatitis, giardiasis, and gastroenteritis.

Long term environmental damage. Raw sewage in streams and lakes can cause illnesses in fish, kill aquatic life, and make the water unusable for swimming, fishing, and as a drinking water source.

Higher costs mean higher utility rates. The utility ends up treating the extra water, and may even have to increase the size of the treatment plant. The utility may also have to pay fines when raw sewage is released to the environment. Increased utility costs are passed along to consumers as rate increases.

What can you do?

You should check to see whether disconnecting your home's downspouts can help solve the problem. Disconnection is usually a simple, relatively inexpensive process. Your local sewer system authority or public works department should be able to tell whether your downspouts are connected to the sanitary sewer and, if so, whether disconnection makes sense.

You can also let other people know why downspouts need to be disconnected and how sewer overflows cost the entire community.

Consider this a work in progress. As I learn more on CMOM, I will pass it on.

CORRECTION: It has been brought to my attention, by whom else, but my PARENTS, that I made an error in my calculations in my article in the Summer 2003 edition of Aquafacts. (At least someone reads my articles) On page 27 under The Example, the calculation should be:

$$\begin{aligned}0.675 \times 2750 \times 8.34 &= 15481 \text{ lbs MLSS} \\15481/1000 &= 15 \text{ 1000 lbsMLSS} \\15 \times 4 &= 60 \text{ lbs CL2/day}\end{aligned}$$

Know what? After looking at that, I'm confused. Give me a call and we'll figure it out. I promise.

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ONE MORE THING: I was helping my daughter with her math homework the other night (don't go there). We had a small disagreement on one of the problems. Finally I said, "Call your Grandfather," (my Father); "He's good at this stuff." I should have quit while I was just a little behind. After finding out that my Daughter was right and I was wrong, my Father got me on the phone and said, "Now Son. Remember Math never was your strong point. Just look at your last article." Thanks Dad.