

BE SURE TO CHECK THOSE VALVES!

By Russ Topp, Circuit Rider

Most water operators routinely exercise main valves about once a year. Nebraska Rural Water purchased a new valve exerciser a couple years ago to help with this chore. If your system is seeing some age, exercising valves can be a back breaking chore to say the least.

Exercising valves is an excellent time to make sure your valves are operating properly. As a rule of thumb, you can figure about 3 rounds per inch plus a couple. An example would be if you are operating a 4 inch valve you should get about 14 turns. $4 \times 3 = 12$ turns plus a couple equals 14. A 6 inch valve should turn about 20 turns. $6 \times 3 = 18$ plus a couple equals 20, and so on.

If for some reason you come across a valve that is in the closed position do not automatically think it's a left-hand valve. Most likely it was left in a closed position by mistake. If you have been in the business long enough sooner or later you will be faced with a main break. It seems like 9 times out of 10 it's at night. If you are lucky you will have some help. When you are trying to shut down a main, usually you run into valves that won't shut down all the way. That leads to going farther down the main and shutting off more and more valves. After a while no one is sure which ones got shut off, and that is how valves are left in the closed position.

Recently I was helping an operator and he mentioned he had 3 left-handed valves in his system. I knew the system was no more than 15 to 20 years old. This is surely not impossible but highly unlikely so we decided to check it out by closing valves and doing a directional flush. Sure enough the valves were inadvertently left in a closed position sometime over the years probably after a break in the middle of the night.

I was working with a different system in the last couple of months and discovered a broken valve in the system. The operator said it had been broken as long as he had worked for the village some 10 or 12 years.

I told you all of that, to tell you this: both of these systems are experiencing bacteria problems. The first system is under an administrative order for coliform bacteria. The jury is still out on the second system, still waiting for the broken valve to be replaced.

The whole issue is you can't get the chlorine to where the problem is with a broken valve in the closed position or valves thought to be left-handed and actually in the closed position. You end up with dead ends where you would have no idea there are any!!

If you are experiencing bacteria problems and have no idea why, check the valves. There may be a closed one or maybe even more.