

Over Cleaning Metal Water Lines

Past experience has proven that pigging metal pipes to the bare steel surface usually invites oxidation. This will ultimately result in customers calling with "red water" complaints.

In order to reduce oxidation, contractors have found that by allowing a few mils of buildup to remain in the line, acts as a barrier thereby preventing oxidation. Also, because the buildup thickness is so little, the "C" value (flow) is minimally affected.

Following are recommended methods and procedures for avoiding over cleaning of cast iron and steel water mains.

- 1. During pigging, monitor pressure drops. By utilizing a pressure recorder at the launch end, pigging should stop when readings essentially level out.
- 2. Another method is by timing pig runs. If the same volume of water is used during pigging for each pig run, then by timing each run, pigging should stop when cleaning has leveled out.
- 3. Timing the effluent will also indicate when pigging should stop. When the number of seconds of receiving effluent is the same during subsequent pig runs, pigging should be stopped.
- 4. Wirebrush pig runs should be limited to two or three.
- 5. By running swabs nearing the end of pigging operation, they will both sweep the line of loose buildup as well as gauge the line's cleanliness. When a swab is retrieved in good condition, pigging should stop.