Fire Hydrant Flushing

<u>Hydrant</u> <u>Flushing</u> <u>Operations</u>

The City of Rhinelander public water system uses groundwater drawn from wells to serve its customers. Whereas these groundwater supplies will contain native concentrations of "hardness" resulting from naturally occurring minerals drawn from an aquifer deep underground, this water when supplied over extended periods of time will gradually accumulate minerals to form sediment in the water distribution system piping used to convey water to the customers. An adverse effect of these accumulations is that the water supplied to a customer's service can then appear discolored, often with a brown or black cloudy tone. The color observed is physically iron, manganese and other naturally occurring mineral elements that are not harmful to consume, yet can act to stain fixtures and clothing. Thus, the City Water Utility addresses this situation each year by performing maintenance that routinely flushes these native sediment materials from the distribution system piping.

In addition to the improved water quality desired by removing these sediments, the flushing operations also help the Water Utility address the following issues:

- Identifies any malfunctions of the hydrant and related valves.
- Determine weaknesses or closed valves in the water distribution system.
- Verifies water volumes and pressures expected of the system.
- Determines and verifies fire flows available at the hydrant locations.

Public announcements will be made by the City Water Utility to alert customers of this work schedule and the specific times flushing activities will be provided. As these flushing operations are completed in the City, the customer can experience a temporary drop in water pressure, or can observe more discolored water right after flushing is performed. These should be temporary effects usually experienced the day that flushing is performed in the area. In as much, there are some helpful hints that are offered to help improve conditions when this flushing has to be performed.

Before the flushing operation begins:

- 1. Fill a bottle or clean, plastic milk jug with fresh tap water and store it in the refrigerator to use for drinking and cooking.
- 2. Do NOT do food preparation or cleaning activities that can rely upon clear water for the best end result.
- 3. Do NOT do laundry during the flushing activities. In particular, do NOT wash white or light-colored laundry during flushing operations.

After the flushing operation is completed:

- 1. Open cold water faucets, basement or lower level piping first, upper floor levels thereafter, and let the water flow until it is clear. Turn off the faucets when clear. Most of any remaining sediment will be addressed with flushing of cold water piping.
- 2. Open hot water faucets, again basement or lower level first, and then upper floor levels thereafter, and let the water flow until it is clear. Turn off the faucets when clear. If there is significant sediment, there may also be need to look at flushing the water heater assembly.
- 3. When both hot and cold water are clear, the water is ready for use as normal.
- 4. Check the faucet screens for trapped particles.
- 5. Wash a load or two of dark-colored clothes first.

Thank you for your assistance with helping the City Water Utility to maintain our systems as desired. Ideally these flushing activities will only affect our customers for a limited time period. If flushing of a customers piping systems does not clear up the water supply as intended, then the City Water Utility should be alerted and further flushing of area main line piping will be performed. Representatives of the Water Utility may be contacted at 715-365-8600 Ext. 2 to assist further.