



## Water Quality Notification

September 21, 2021

On Sept 20<sup>th</sup> OWSI experienced some water quality calls concerning color in the water. The problem areas seem to be from Highland Drive east. The testing indicates that the water is consumable. The State Department of Health Drinking Water division has been notified.

It was believed to be a manganese release at first. The reasoning was that on Sept. 19 the new filtration system was ran and in doing so the normal flow of water was reversed in a section of water main to feed the system. OWSI dispatched crews to flush and there seemed to be some improvement. There were some unusual complaints on Tuesday 9/21 that made OWSI investigate the filter system. It was found that when the system was shut down the discharge valve was closed stopping flow through the system. The feed valve was errantly left open. The result of that feed valve being open was that the chemicals used in the new treatment facility could slowly siphon into the distribution system. When that happened there were three chemicals introduced into the distribution system - Sodium Hypochlorite, Ferric Chloride and Potassium Permanganate.

- Sodium Hypochlorite is bleach that is used for disinfection. Testing on the 21<sup>st</sup> was 0.12 mg/l. The maximum allowed is 4.0 mg/l.
- Ferric Chloride is iron used for arsenic removal. The total iron level on the 21<sup>st</sup> was 0.45 mg/l. Iron is considered a secondary contaminant as it is an aesthetic issue in water. The recommended maximum is 0.3 mg/l.
- Potassium Permanganate is used as a conditioner for the filter media. It will increase the manganese level in water but then would be filtered out. Manganese is a secondary contaminant. The level tested on the 21<sup>st</sup> was 0.135mg/l. The recommended maximum level is 0.5 mg/l.

OWSI will continue to work on removing the color from the water system which may take another few days. While we are sorry this happened, this may be a good test to see what could happen once we switch the system over to filtration. We anticipated some coloring due to the manganese in the existing lines throughout Port Ludlow. We will try to give enough advance notice so that you have time to collect and store water should you desire. We also will be flushing immediately after switching to the new system to help clear the lines.