



Tilton & Northfield Aqueduct Co., Inc.

Established 1887

14 Academy Street

Tilton, New Hampshire 03276

Phone (603) 286-4213

Fax (603) 286-2114

tnwd@metrocast.net

t-nwaterdistrict.net

IMPORTANT INFORMATION TO THE TNWD USERS

Changes to NHDES Manganese Health-Based Standards for Drinking Water:

In 2021, water quality data from the TNWD's Consumer Confidence Report (CCR) sent to all water users indicated iron levels as high as 0.38 mg/L and manganese levels as high as 0.31 mg/L. These levels exceed the regulatory Secondary Maximum Contaminant Level of 0.3 mg/L for iron, and 0.05 mg/L for manganese. Iron and manganese has long been an aesthetic concern for public water system customers, as many of the TNWD customers have experienced, although there is no federal or state primary (health-based) maximum contaminant level (MCL) for the metal.

The EPA has recommended a lifetime health advisory (LHA) for manganese of 0.3 mg/L. In addition to EPA's Manganese LHA of 0.3 mg/L for infants, New Hampshire's ambient groundwater quality standard (AGQS) for manganese was revised from 0.84 mg/L to 0.3 mg/L in December 2020 (effective January 1, 2021). The AGQS is a health-based standard and is enforceable for public water systems. The New Hampshire Department of Environmental Services (NHDES) is currently developing rules to require public water systems notify customers when manganese exceeds 0.1 mg/L. Because short-term exposure to manganese is considered a health risk to infants below 12 months old, NHDES is proposing to require notification protocols that are consistent with acute health risks.

The effective date for NHDES' new manganese public notification requirements is anticipated to be July 1, 2022.

TNWD Plan to Comply with a New Manganese Limit:

The TNWD has initiated a plan to address the anticipated regulation changes for manganese, including:

- 2019 Developed a Capital Improvement Plan that included design and construction of a future Water Treatment Facility (WTF) to remove iron and manganese to levels below the secondary MCLs, which for manganese is well below the new NHDES health-based public notification limit.
- 2019 Initiated a Water Rate Study plan (Completed in 2020) for the funding of a planned WTF.
- Developed an estimated cost of \$6,500,000 for a new Water Treatment Facility to be constructed on the existing Rte. 140 Well Facility site in Northfield, NH.
- 2020/2021 Applied for and subsequently were selected to receive both NHDES SFR Loans and grants to fund the planned WTF. Present commitments from NHDES includes \$1,950,000 in grants and \$4,550,000 in low interest (1.256 %) loans.
- 2021 Hired Stantec to perform a Water Treatability Study to begin the process of identifying appropriate water treatment technologies that are available to treat the water to comply with the new health-based manganese public notification limit and to recommend the most cost-effective treatment strategy for the proposed new TNWD WTF.
- 2022 Hired Stantec to team with a water treatment pilot testing contractor to test a number of water treatment technologies to demonstrate whether the technologies can effectively treat the well water to provide drinking water for the TNWD users that meets the regulatory requirements.

The TNWD's Plan Going Forward:

There is much more to come and do to advance this new WTF for the TNWD and their users. Anticipated future initiatives and the schedule include:

- Apply for NHDES Ground Water Trust Grants that can potentially increase grant funding for the WTF by 10% -20% to reduce the local funding burden.
- Advance the design of the WTF for bidding in the late fall of 2022 or early 2023.
- Planned construction of the WTF in 2023/24.

As more information becomes available and as the TNWD advances implementation of this plan there will be additional communication to the users.

OVER 