

City of Medina Water Treatment Plant Expansion Project

A Safe Drinking Water Project



Adding Filter 3 Prevents Harm to Infants and Children

PROJECT BACKGROUND:

The City of Medina is requesting funding to expand their water treatment plant (WTP). The current maximum day demands are approaching the water treatment plant's (WTP) reliable capacity. Water sourced from existing wells has elevated levels of Manganese. Manganese is regulated by the Environmental Protection Agency (EPA) as a secondary standard contaminant due to its physical effects on water. The EPA is in the process of determining whether to update the regulatory requirements on manganese with more research and additional occurrence data; they are considering the health effects of manganese in their regulatory determination. In addition, the Minnesota Department of Health has established a maximum recommended manganese concentration for infants and adults. A feasibility study was completed in 2022 and recommended an existing filter rehabilitation and expansion of the plant with a third filter to address manganese concentrations.

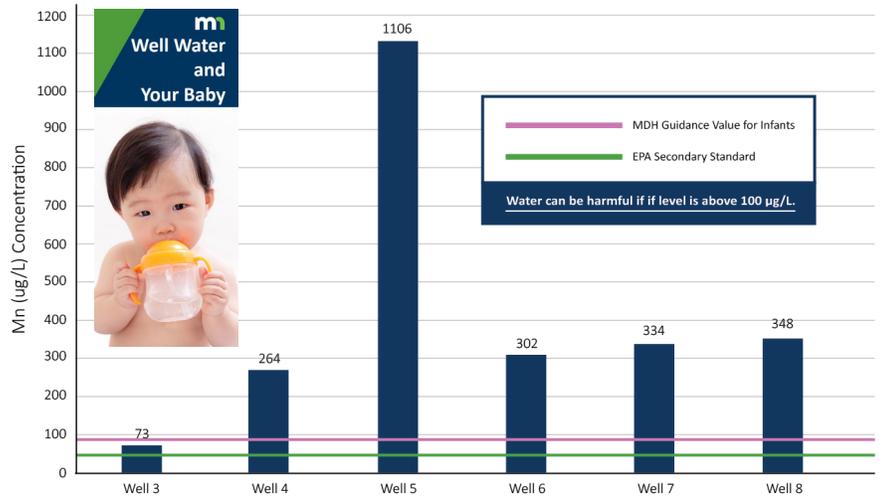
PROPOSED PROJECT:

- Existing filter rehabilitation completed in 2023, the remaining improvements include the plant expansion with the addition of the third filter.
- The additional filter will address the elevated manganese levels and provide the necessary redundancy and reliability of plant operations to bring manganese to levels deemed safe for infants as recommended by the MDH.
- Additional backwash and tank connectivity upgrades will enhance the existing plant operations and further support sustainable removal of Manganese
- Final design and bidding of the project is planned for 2024, with construction in 2025, and startup in 2026

ESTIMATED PROJECT COST: \$2,900,000

Manganese

High levels of manganese can cause problems with memory, attention, and motor skills. It can also cause learning and behavior problems in infants and children.



https://www.isantiscwd.org/images/Well_Water_and_Your_Baby.pdf

PROJECT GOALS:



The City of Medina and its leadership are focused on providing safe drinking water to its residents now and into the future.



Reduce manganese concentration in the water to levels below the MDH recommended levels.



The City is looking for funding partners on the project including the Mn legislature through the bonding bill and the Mn Drinking Water Revolving Fund.