



LEGISLATIVE MEMORANDUM

TO: Honorable Mayor and Members of the City Council

FROM: Scott Morgan, Interim City Manager

THRU: City Manager's Office

DATE: January 2, 2025

RE: Discussion and direction on fluoridation of the City's Potable Water System (Councilman Langevin).

SUMMARY:

Fluoride is a naturally occurring chemical compound present in groundwater, fresh and salt water, rainwater, soil, plants, and foods. Community water fluoridation is the process of adjusting the amount of fluoride in drinking water to a level recommended to prevent tooth decay. Historically, community water fluoridation was considered to be a method to systemically, through ingestion, deliver fluoride to all community members. On November 22, 2024, Florida's State Surgeon General, Joseph Ladapo, MD, PhD, announced guidance recommending against community water fluoridation due to the neuropsychiatric risk associated with fluoride exposure.

The City's North Regional Water Treatment Plant (NRWTP) fluoridation system became inoperable and has not fed fluoride since 2016. The City's South Regional Reverse Osmosis Water Treatment Plant (SRWTP) fluoridation system became inoperable in 2017. On July 21, 2022, Staff requested the Council to approve a contract with Odyssey Manufacturing for \$163,210 to purchase and install water fluoridation equipment to fluoridate the potable drinking water from NRWTP. The July 2022 request was also for submitting a grant application to the Florida Department of Health's Florida Fluoridation Grant to partially pay for the upgrades. The grant agreement was approved for \$149,981 with a contract start date of April 1, 2023, and an end date of September 30, 2024. The grant included the purchase and installation of a bulk tank, scale, pump, pump skid, fluoride analyzer, containment area coating, and associated labor, including SCADA programming. On August 4, 2022, Council approved a contract with Odyssey Manufacturing for \$154,740 to purchase and install water fluoridation equipment to fluoridate the potable water at SRWTP.

In Summer of 2024, Utilities staff requested the City Manager to reconsider the grant-funded fluoride project. Staff identified several health, safety, and financial considerations, including safety of treatment operators, plant infrastructure corrosion, emerging health concerns associated with fluoride concentrations, and trends toward re-evaluation of fluoridation practices in the water

industry. In August of 2024, the City Manager approved allowing the grant agreement to expire on its terms. The City Attorney's office provided guidance that the action of allowing the grant agreement to expire did not require Council approval and could be done administratively. On August 29, 2024, the City Manager provided a letter that ended the contractual relationship with the Department of Health. On September 20, 2024, the City issued a check for \$52,900 reimbursing the Department of Health for grant funds previously received.

If City Council provides direction to remove fluoridation from plant operations, the City must modify its Public Water System permits issued by the Florida Department of Environmental Protection (FDEP). To initiate this action, the City will issue a task order to our utility consulting engineer to request the modification. Subsequently, because of a change of treatment, the Utility may be required to increase the monitoring for lead and copper from a reduced schedule to an increased schedule. The current reduced schedule involves testing fifty samples every three years. The increased monitoring requires testing one hundred samples twice a year, for a period of one year; after that time, the City can return to a reduced monitoring schedule. For informational purposes, the cost for the increased sampling would be approximately \$2,700 (\$13.50 per test). Staff will look into an option to petition FDEP to waive the requirement of increased testing, as the City has not fluoridated the water since 2016-2017 and has also had increased sampling during that period.

If Council directs Staff to end potable water fluoridation and the FDEP permit is modified, the Utilities Department will re-purpose the existing fluoride equipment installed to date at both NRWTP and SRWTP to instead hold liquid ammonia. The current treatment method is gaseous ammonia, which has safety risks to both plant personnel and infrastructure. Modification from gaseous ammonia to liquid ammonia would significantly mitigate that risk. Staff's intent would be to modify the current work and equipment with Odyssey to repurpose said equipment for liquid ammonia. The estimated cost to make those modifications would be approximately \$12,000 per plant.

The annual increase in cost for liquid ammonia vs. gaseous ammonia is approximately \$65,000 for both plants. Conversely, if the City proceeds with the fluoride project, the annual cost for chemicals to provide fluoride is approximately \$30,000 for both plants. Thus, the estimated net annual chemical cost to end fluoridation and instead utilize the equipment for liquid ammonia vs. gaseous ammonia is approximately \$35,000.

REQUESTING DEPARTMENTS:

City Manager's Office

FISCAL IMPACT:

This action has no fiscal impact. Future fiscal impact includes engineering consulting services for the FDEP permit modification letter, increased operational testing for lead and copper due to modification to the FDEP permit, contract modifications for associated material and labor costs to modify the fluoride tanks to hold liquid ammonia, and chemical costs. Any budgetary actions requiring Council approval will be brought forth under a separate agenda item. All expenditures would come from the Utilities Department enterprise fund.

STAFF RECOMMENDATION:

Request for Council direction and approval to modify the City's FDEP permit to end fluoridation of the City's potable water system.

ATTACHMENT:

1. Grant termination letter
2. Council Legislative Memo from 7/21/2022 for NRWTP
3. Council Legislative Memo from 8/4/2022 for SRWTP