



City of Pflugerville

Legislation Text

File #: 2020-8369, **Version:** 1

Discuss and consider action to authorize the City Manager to approve the purchase of replacement water treatment plant membranes from ZENON Environmental Corporation (also known as SUEZ) in the amount of \$537,040.00.

All five trains of the membrane units at the Surface Water Treatment Plant have seen significant damage from zebra mussel shells over the past year and half. This item is proposing to replace the water treatment membranes for train 3 which has seen the most damage, has the oldest modules of the trains at 7 years, and currently is out of service due to the damage. While the standard life of the membrane modules is generally around 10 years, zebra mussels have decreased this expected life of the membranes. Train 3 has significant damage that is consistent with zebra mussel damage seen on trains 1 and 2 that were previously replaced in 2019.

SUEZ Water Technologies & Solution was contacted and an autopsy report was completed on the membrane modules to see if they could be repaired instead of replaced to extend the life of the existing membranes. This autopsy report showed that any repairs performed could not be guaranteed to produce a membrane train that would produce acceptable results and stay in compliance with TCEQ regulations regarding membrane integrity testing.

Furthermore, while we have currently started the process to identify the expansion design for the Surface Water Treatment Plant, this process will take significant time which will require this membrane train to be in service until the final expansion is completed. Given the rough timeline of how long the expansion will take; this replacement membrane train is expected to last until it is completed.

If replaced, this membrane train would remain off until the strainer relocation project is completed to prevent zebra mussels from entering the plant to ensure that we get the longest possible life out of these new membrane modules. The strainer relocation project and the replacement of train 3 membranes are anticipated to be installed and operational prior to peak summer usage. With the replacement of the membranes in train 3, the City is will have five operational trains for peak summer usage providing for better operational flexibility. If the train 3 membranes are not replaced and another membrane train goes down for any reason during peak summer usage, the plant would only have 3 trains operational and may not be able to handle peak demands.

SUEZ Water Technologies & Solutions is a sole source provider of the membranes that will be replaced. Membranes pricing is in line with the City's contract with SUEZ guaranteeing prices for twenty (20) years subject to adjustment for inflation (consumer price index (CPI) All Urban Consumers according to US Bureau of Labor Statistics) or a maximum equivalent price per gallon of treatment capacity in the event that the module area/permeability etc. changes such that the same amount of feed water can be treated with fewer modules of the next generation design. The contract for this pricing was entered into on May 1, 2003 and will expire May 1, 2023. The City has received pricing based on the contract from SUEZ Water Technologies & Solutions concerning this purchase

with a price of \$537,040.00 for the purchase and installation of replacement water treatment plant membranes for train 3.

The purchase of the membranes will require an amendment to the budget that will be included in the next request for budget amendments.

City staff plans to proactively add future membrane replacements coinciding with the end of life of the membranes to future budgets to account for the improvement.

Prior City Council Action

City Council approved the purchase of water treatment plant membranes from SUEZ Water Technologies & Solutions in the amount of \$994,060.00 at the July 9, 2019 meeting.

Deadline for City Council Action

Action is requested on April 28, 2020.

Funding Expected: Revenue Expenditure N/A

Budgeted Item: Yes No N/A

Amount: \$537,040.00

1295 Form Required? Yes No

Legal Review Required: N/A Required Date Completed: 5/8/2020

Supporting documents attached:

Membrane Replacement Proposal

Sole Source Letter

Suez Surface Water Treatment Plant Trip Report February 2020

Recommended Action

Approve the purchase of replacement water treatment plant membranes from ZENON Environmental Corporation (also known as SUEZ) in the amount of \$537,040.00.