ITEM # 48
DATE 06-14-22

COUNCIL ACTION FORM

SUBJECT: LIQUID SODIUM HYPOCHLORITE PURCHASE FOR WATER TREATMENT PLANT AND POWER PLANT

BACKGROUND:

This contract is for the purchase of sodium hypochlorite, which is used for disinfection in the water treatment process at the Water Plant and treatment of cooling tower water at the Power Plant.

Actual usage of sodium hypochlorite will depend on water quality and consumption. The FY 2022/23 Water Plant operating budget estimates 52,000 gallons at $1.04/gallon for a total of $54,080. The Power Plant budget includes $35,000 for sodium hypochlorite. The following bids were received for the purchase of sodium hypochlorite on May 19, 2022:

Bidder	Price/Gallon
DPC Industries, Inc., Bellevue, NE	$ 1.74
Rowell Chemical Corp., Hinsdale, IL	$ 2.14
Hawkins, Inc., Roseville, MN	$ 2.43
Budgeted Unit Price	*$ 1.04*

The low bidder is DPC Industries, Inc., Bellevue, NE, with a price per gallon of $1.74. This is a substantial increase in price compared to the budgeted unit price of $1.04 per gallon. For comparison, the sodium hypochlorite contract price for FY 2021/22 was $0.98 per gallon (also with DPC Industries).

In addition to the substantial increase in sodium hypochlorite unit price, DPC Industries, Inc. is charging a $200 fuel surcharge per load. Also, the contract price is offered only through December 31, 2022, so staff will rebid the sodium hypochlorite contract again this fall for the second half of the fiscal year.

These bids reflect trends in other chemical prices. Water Plant staff recently bid four other chemical contracts with the following results:

Chemical	Unit Cost	Increase from FY 21/22	FY 22/23 Water Plant Budget Shortfall
Sodium Hypochlorite	$1.74/gal	78%	$36,400
Fluoride	$1.67/lb	109%	$9,520
Carbon Dioxide	$88/ton	10%	$760
Lime	$225/ton	35%	$169,500
Total Estimated Budget Impact (Water Utility)			**$216,180**

Water Plant staff is evaluating multiple options to mitigate these steep cost increases. First, storage capacity is being revisited to possibly accept larger deliveries of sodium hypochlorite. This would reduce or eliminate the surcharge per load. Also, staff recently purchased a large supply of fluoride at the current price to avoid having to purchase any fluoride in FY 2022/23. Similarly, some additional loads of lime can be purchased before the end of FY 2021/22.

Lastly, a 5% chemical contingency ($30,648) is included in the FY 2022/23 operating budget. This contingency is for the sum of all Water Plant process chemicals, and is not specific to sodium hypochlorite. Staff will also be reviewing and reprioritizing capital projects later this fall to minimize the impacts of all of the different cost increases impacting the utility.

Power Plant staff has worked in the past six months to optimize the Plant's chemical dosing system, which staff believes will reduce the amount of sodium hypochlorite necessary to treat cooling tower water. The FY 2022/23 Power Plant budget for sodium hypochlorite was based on the historically higher chemical consumption. Therefore, staff believes the increased per-gallon cost of sodium hypochlorite can be offset by lower consumption, within the available budgeted funds. However, additional funds for chemical supplies, if necessary, will be made available from the Power Plant's maintenance budget.

ALTERNATIVES:

1. Award a contract for the purchase of liquid sodium hypochlorite to DPC Industries, Inc. of Bellevue, NE, in the amount of $1.74/gallon. This contract is for the first six months of FY 2022/23.

2. Reject all bids and attempt to obtain the required services on an as-needed basis.

CITY MANAGER'S RECOMMENDED ACTION:

Liquid sodium hypochlorite is an essential treatment chemical, as it provides the final disinfectant barrier that keeps drinking water and cooling tower water safe from microbial contaminants. The Water Plant and Power Plant staff will be working over the coming months to evaluate multiple options in these utility budgets to offset the steep cost increases.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1.