



Folsom City Council Staff Report

| | |
|------------------------|---|
| MEETING DATE: | 8/12/2025 |
| AGENDA SECTION: | Consent Calendar |
| SUBJECT: | Resolution No. 11437 – A Resolution Authorizing the City Manager to Execute an Agreement with NTU Technologies, Inc. for \$387,000 from the Water Operating Fund (Fund 520) for the Purchase of Chemicals for the Water Treatment Plant |
| FROM: | Environmental and Water Resources Department |

RECOMMENDATION / CITY COUNCIL ACTION

The Environmental and Water Resources Department recommends the City Council pass and adopt Resolution No. 11437 – A Resolution Authorizing the City Manager to Execute an Agreement with NTU Technologies, Inc. for \$387,000 from the Water Operating Fund (Fund 520) for the Purchase of Chemicals for the Water Treatment Plant.

BACKGROUND / ISSUE

The City of Folsom's Water Treatment Plant (WTP) utilizes surface water from Folsom Lake for water supply. The WTP is designed to produce 50 million gallon per day (mgd) of potable water. The treatment processes include rapid mix, pretreatment with a conventional flocculation and sedimentation basin, and an Actiflo system for high rate clarification, a conventional sand/anthracite dual media filter, and solids handling facilities. In order to be consistent with State regulatory requirements and industry best management practices, the City uses a variety of chemicals to aid in the treatment process listed above. These chemicals are vital to these treatment processes.

Several of the chemicals used at the WTP have specific and proprietary properties that necessitate the City to contract directly with a company that can provide these chemicals to meet the City's water treatment requirements. These chemicals include:

- Aluminum Chlorohydrate (ACH) Primary Coagulant
- Dry Anionic Polymer
- Dry Non-ionic Polymer

- Liquid Cationic Polymer
- Liquid Anionic Polymer

This resolution will authorize the City Manager to execute an agreement with NTU Technologies, Inc. for the purchase of chemicals for use at the Water Treatment Plant.

POLICY / RULE

In accordance with Chapter 2.36 of the Folsom Municipal Code, supplies, equipment, services, and construction with a value of \$75,049 or greater shall be awarded by City Council.

ANALYSIS

When using coagulants, raw water properties can have a significant effect on the type of coagulant to use in the treatment process. These properties include alkalinity, water temperature, turbidity and filterability. These raw water quality properties are very different depending on the time of year, weather events such as storms and snow melt, and Folsom Lake turnover. Changes in the incoming raw water quality will affect settling rates in filters, sludge production, required chemical dosages, and pretreatment turbidity which can all impact the water quality of the treated water. In addition, City staff operates a conventional flocculation and sedimentation basin, a high rate Actiflo flocculation system, and a solids handling system that require specific chemical additions to properly treat the water. Using a polymer that can handle the wide range of these water properties entering the WTP is important to the treatment operators to maintain consistent water quality.

The current chemicals used by the City in the treatment process are very successful in providing high water quality for the City's water customers. In order to maintain current water quality standards, any new chemicals must also meet these standards. In order to ensure any new chemicals would be able to meet these standards, the City would have to perform various analytical tests to confirm the new polymer's ability to perform in a variety of conditions. The process for testing in all seasons of the year, after storm events, during snow melt, and high alkalinity water would be at least a year long process.

In addition to the analytical testing, the City operators would need to inform and follow the State Water Resources Control Board, Division of Drinking Water (DDW) requirements to confirm that changing chemicals would not adversely affect the water quality produced. A year long trial period to confirm the polymer performance, as well as a contingency plan, would be required by DDW.

Furthermore, the City uses specific proprietary chemicals from NTU Technologies at the WTP and receives quality product and good customer service. During calendar year 2018, operators optimized the treatment process, which led to reduced polymer usage throughout the system. Part of this reduction was due to service and testing provided by NTU Technologies. NTU has a location in Davis, CA which allows for very quick response to any City problems and requests.

EWR staff contacted five water providers in the area, including San Juan Water District, Placer County Water Agency, El Dorado Irrigation District, City of Roseville and City of West Sacramento to discuss chemical purchasing and usage. Through these discussions with other water providers in the area, it became clear that treatment process, water supply, quantity of chemicals

purchased, chemical equipment, storage available, and chemical dose all affected which polymer was used at a specific plant. There was no correlation to directly compare polymer usage and pricing.

The table below shows costs for chemicals that Environmental and Water Resource staff estimate will be used during fiscal year 2025-26:

| Chemical | \$/lb | Est. cost for FY25-26 |
|--|--------------|----------------------------------|
| Aluminum Chlorohydrate, ACH (Primary) | \$0.69 | \$300,000 |
| Dry Anionic Polymer | \$3.61 | \$55,000 |
| Dry Non-Ionic Polymer | \$4.36 | \$5,000 |
| Liquid Cationic Polymer | \$2.39 | \$5,000 |
| Liquid Anionic Polymer | \$2.16 | \$22,000 |
| Total | | \$ 387,000 |

The Environmental and Water Resources Department recommends a waiver of bid and requests that the City Council authorize the City Manager to execute an agreement with NTU Technologies, Inc. for the purchase of chemicals for the Water Treatment Plant in the amount not to exceed \$387,000.

FINANCIAL IMPACT

Sufficient funds are budgeted and are available in the Water Operating Fund (Fund 520) in Fiscal Year 2025-26 for this agreement.

ENVIRONMENTAL REVIEW

This action is exempt from environmental review under the California Environmental Quality Act (CEQA).

ATTACHMENT

Resolution No. 11437 – A Resolution Authorizing the City Manager to Execute an Agreement with NTU Technologies, Inc. for \$387,000 from the Water Operating Fund (Fund 520) for the Purchase of Chemicals for the Water Treatment Plant

Submitted,

Marcus Yasutake, Director
ENVIRONMENTAL AND WATER RESOURCES DEPARTMENT