



CITY COUNCIL
AGENDA ITEM STAFF REPORT

MEETING DATE:	November 12, 2024
TITLE:	Ordinance to Waive the Purchasing Policy to Allow Sole Source Purchase of Polymer from Polydyne, Inc. for Dewatering of Wastewater Bio-solids
DEPARTMENT:	Public Works - Wastewater Department
PROJECT MANAGER:	William Jones, Superintendent of Utilities
REQUESTED ACTION:	Approval of Ordinance to Waive the Purchasing Policy to Allow Sole Source Purchase of Polymer from Polydyne, Inc. for Dewatering of Wastewater Bio-solids
STRATEGIC PLAN GOAL(s):	Goal #4: "Invest in public infrastructure" Goal #7: "Support excellent municipal services"
ATTACHMENTS:	Ordinance and Polydyne Sole Source Letter for Polymer

Summary Recommendation

Staff recommends approval of the Ordinance to waive the purchasing policy to allow for sole source purchase of polymer from Polydyne, Inc. for dewatering of bio-solids.

Executive Summary

Staff are requesting a waiver of the City's purchasing policy for fiscal year 2025 for the sole source purchase of polymer from Polydyne, Inc. Polymer is a necessary additive for the bio-solids dewatering process at the Wastewater Treatment Plant (WWTP). To optimize the dewatering process and minimize processing costs, the polymer used in the dewatering process must be formulated to match the varying characteristics of the bio-solids being processed. Allowing the sole source purchase of polymer will provide staff with flexibility to purchase the optimal polymer best suited for the City's needs.

Background

Polymer is an essential additive in the bio-solids dewatering process at the Wastewater Treatment Plant (WWTP). It assists in the coagulation, or binding, of organic solids in liquid sludge, forming larger solid particles known as floc. Once floc is produced, it is processed by the screw press, which extracts excess liquid to create a drier sludge product, often referred to as "cake."

To ensure efficient dewatering and cost-effectiveness, the polymer must be specifically formulated to match the changing characteristics of the sludge. These characteristics fluctuate with seasonal temperature changes and increased flow from sanitary sewers during storm events due to infiltration. Proper polymer selection requires ongoing testing and analysis of various polymers at different feed rates, allowing staff to identify the most effective formulation and dosage for optimal dewatering.

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Purchasing Policy Waiver for Sole Source Purchase of Polymer

With current Bioset screw press operations, staff expect ongoing adjustments in polymer formulations in response to seasonal and operational variations in sludge characteristics. This adaptation will necessitate additional testing to select the most suitable polymer formulas and feed rates.

Granting a sole-source purchasing agreement with Polydyne, Inc. will provide staff with the flexibility to work directly with suppliers and evaluate a range of polymers without being locked into an inefficient fixed-price polymer through the standard bid process. This flexibility supports the goal of achieving optimal sludge dewatering performance and minimizing costs.

The polymer rate for 2025 will remain the same as 2024 at \$1.65 per pound. It is anticipated that the 2025 annual cost estimate for polymer will not exceed \$200,000.

Recommendation

Staff recommends approval.

Alternatives

There are no practical alternatives to this request without being wasteful.

Funding Source

Enterprise Fund; Water & Wastewater Plant Budgets