



Town of Johnstown

TOWN COUNCIL AGENDA COMMUNICATION

AGENDA DATE: April 19, 2021

SUBJECT: Purchase of Systems to address taste and odor

ACTION PROPOSED: Consider approval taste and odor system purchases

ATTACHMENTS: 1. Spreadsheet of Cost

PRESENTED BY: Marco Carani, Director of Public Works

AGENDA ITEM DESCRIPTION:

Enclosed for Council review and consideration is a request to purchase multiple components to address taste and odor issues in the Town's water system. This addition to the water treatment process will necessitate a budget amendment for the 2021 Water Fund.

In FY 2021, Council appropriated funds for Staff to improve the taste and odor issue with our water. We have hired Burns & McDonnell Engineers as a consultant to assist Staff with the proper system(s) to remove the taste and odor issues from our drinking water.

During our work session held on April 12, 2021. Staff requested direction from Council on short term and long term options towards the improvements to manage the Town's drinking water taste & odor issues. In the short-term to mitigate the taste and odor issues, Council was presented during the work session with a recommendation that consisted of three significant changes to the treatment of the water. These changes were as follows:

Granular Activated Carbon (GAC)

A GAC system is especially suited for the removal of dissolved organic compounds responsible for poor taste and odor in drinking water. The recommendation included rent or purchase of a six (6) vessel system to ensure 10 minutes contact time with the carbon to address taste and odor issues.

Ultrasonic Buoy at Johnstown Lake.

This buoy activates the optimal ultrasonic treatment frequencies according to the water conditions and type of algae present. This reduces existing algae and prevent the growth of new algae. The recommendation includes the purchase of 2 units – a primary unit and a secondary unit that communicates with the primary unit. Both units would be installed at Johnstown Lake. These units would keep algae from rising to the surface of the lake and subsequently impact the growth of MIB and Geosmin in the raw water.

Powder Activated Carbon (PAC) at Lone Tree Reservoir.

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The Town currently has a PAC unit at Lone Tree Reservoir. The recommendation is to modify the unit to make the hopper larger and install a new auger that would regulate the application of PAC into the system as water travels through the 11-mile trunk line to the treatment plant. The addition of the larger hopper will provide for fewer replacements of the PAC throughout a 24-hour cycle.

At the conclusion of the work session, Council directed Staff to prepare an agenda item for the interim improvements to Council at the next regular meeting for formal consideration. Accordingly, attached is a spreadsheet which provides an overview with costs of the improvements to the system to address taste and odor issues. The overview shows the costs for this current fiscal year to have the entire system up and running as well as the anticipated costs for FY 2022 and FY 2023. The spreadsheet also includes scenarios related to the Granular Activate Carbon (GAC) units. These considerations are to rent the units, purchase the units and keep them, or purchase with a plan to sell based on alternative improvements for taste and odor which may be considered with the water treatment plant expansion project.

Budgeted for FY 2021 was \$625,000, with was focused on use of a Powder Activated Carbon (PAC) system installed at the Lone Tree Reservoir. Following this study by Burns & McDonnell and based on the recommendations described above, the cost to control taste and odor for FY 2021 is \$1,744,000. This price includes all of the equipment and installation, engineering, a replacement/recharge of the carbon (if necessary), and a small contingency of 2.8%. To complete this project as presented, an additional \$1,119,000 will need to be appropriated.

This is an important project for our community as we work to meet water customer expectations. Approval of this project shows a commitment by the Town to being responsive and active in making positive change for our water.

LEGAL ADVICE:

Not applicable

FINANCIAL ADVICE:

\$625,000 is currently budgeted for FY 2021. A budget amendment will be needed to fund the remaining \$1,119,000

RECOMMENDED ACTION: Approval to purchase and install the GAC, Buoy, and PAC systems as presented in the spreadsheet.

SUGGESTED MOTIONS:

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For Approval: I move that we approve the purchase and installation of the presented items as detailed in the attached spreadsheet to address taste and odor of the Town's drinking water which include the

Granular Activated Carbon System, the buoys, and improvements to the PAC at Lone Tree Reservoir. These items will necessitate a budget amendment to be presented to Council at a time determined appropriate by Staff prior the close of fiscal year 2021.

For Denial: I move that we deny the purchase and installation of the presented items as detailed in the attached spreadsheet to address taste and odor of the Town's drinking water and pursue other alternatives.

Reviewed and Approved for Presentation:



Town Manager

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