

DENVER BOARD OF WATER COMMISSIONERS

Meeting Date: March 13, 2013

Board Item: V-E-1

Purchase Authorization for Ion Trap Gas Chromatography-Mass Spectrometer

Action by Consent

Action

Information

Denver Water's Water Quality Lab collects samples from influent/effluent flows over a six-month period annually. Sampling in 2012 occurred on a bi-weekly schedule at two different depths at one to two locations in Marston. These samples are then sent to a third-party laboratory for taste and odor compound analysis. The results of the third-party analysis are used to monitor levels and determine the amount and frequency of certain water treatment chemicals needed to mitigate taste and odor compounds. These compounds were detected at historic highs in 2012 and Marston remained out of service for almost 5 months.

Currently, Denver Water spends a minimum of \$10,000.00 per year on this third party laboratory testing and the Water Quality Lab plans to expand its monitoring program to include additional locations in Marston, Bear Creek, Plum Creek and Chatfield which will increase cost to a minimum of \$26,000. It is estimated that, once this monitoring program is expanded, Denver Water would save between \$14,000.00 and \$63,000.00 per year from reduced treatment chemical usage. Additionally, this equipment purchase will save Denver Water \$12,000.00 per year on third-party N-nitrosodimethylamine (NDMA) testing. NDMA is an emerging contaminant that will soon be regulated. Expansion of the monitoring program will also allow Denver Water to manage the treatment process much more quickly and could result in significant cost avoidance savings.

Funding for the Ion Trap Gas Chromatography-Mass Spectrometer was not included in the 2013 Budget or capital equipment plan for this expenditure, so approval of a budget variance is necessary for this purchase.

Recommendation:

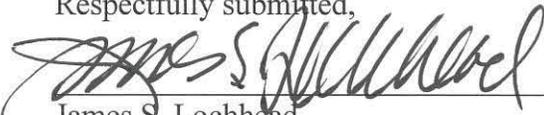
It is recommended the Board authorize purchase of a 240 Ion Trap Gas Chromatography-Mass Spectrometer from Agilent Technologies for a total purchase order of \$148,554.10.

Approvals:

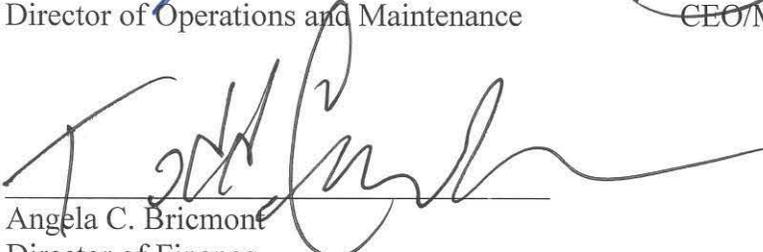


Thomas J. Roode
Director of Operations and Maintenance

Respectfully submitted,



James S. Lochhead
CEO/Manager



Angela C. Bricmont
Director of Finance