

**Metropolitan Domestic Water Improvement District
Board of Directors Meeting**

September 11, 2017

Analysis of Alternatives Related to Mitigating 1,4-Dioxane

Synopsis

The Board of Directors is requested to authorize utilizing Carollo Engineers to perform professional engineering services via the Arizona Department of Administration State Procurement Office annual professional services list. Work will include providing a high-level cost estimate for wellhead treatment of 1,4-Dioxane and the development of a scenario to blend water that contains 1,4-Dioxane with other water sources to a concentration that is below the health advisory.

Background

As noted in previous Board reports, staff discovered the presence of 1,4-Dioxane at the Horizon Hills wellsite. The well was taken offline while a blend strategy at the Horizon Hills storage facility could be investigated. Following that investigation, staff determined that a blend strategy using the Horizon Hills storage facility would not provide a reliable concentration that is below the United States Environmental Protection Agency (USEPA) 1,4-Dioxane health advisory of 0.35 parts per billion (ppb).

Issues

Staff proposes performing an analysis that provides a conceptual cost for wellhead treatment and investigates the possibility of an in-pipe blend scenario using the Horizon Hills, Thornydale, Ina/CDO and Marlene wells to ensure levels of 1,4-Dioxane do not exceed 0.35 ppb at the first customer service connection.

The analysis will include a conceptual cost for wellhead treatment and a conceptual cost estimate for the in-pipe blend scenario.

Pending the outcome of the in-pipe blend analysis, an additional analysis may be scoped to perform a regional blend scenario, which would be brought to the Board for consideration at a later date.

Recommendation

Staff recommends the Board approve utilizing Carollo Engineers to perform professional engineering services related to mitigating 1,4-Dioxane in the amount of \$54,877 using the Arizona Department of Administration State Procurement Office annual professional services list.

Suggested Motion

I move to approve utilizing Carollo Engineers to perform professional engineering services related to mitigating 1,4-Dioxane in the amount of \$54,877 using the Arizona Department of Administration State Procurement Office annual professional services list.

Respectfully submitted,

Sheila M. Bowen, P.E.
District Engineer

I concur with the above-noted recommendation.

Respectfully submitted,

Joseph Olsen, P.E.
General Manager