Metropolitan Domestic Water Improvement District Board of Directors Meeting

January 8, 2018

Update on the Analysis of Alternatives Related to Mitigating 1,4-Dioxane

Synopsis

In September 2017, the Board of Directors authorized utilizing Carollo Engineers to provide 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

Carollo performed an analysis using the District's water system model. Staff will provide an update of the findings.

Recommendation

Staff recommends continuing active monitoring and ongoing coordination with regional water providers and the Arizona Department of Environmental Quality regarding future regulation of 1.4-Dioxane.

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Suggested Motion

I move to direct the General Manager to continue implementation of enhanced sampling protocols and monitor for any potential impacts to other District wells, continue to work with regional partners and regulators, and to provide updates to the Board if the situation changes.

Respectfully submitted,

Sheila M. Bowen, P.E. District Engineer

I concur with the above-noted recommendation.

Respectfully submitted,

Joseph Olsen, P.E. General Manager