

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

**May 8, 2017**

**Approval and Award for Water Treatment Media Regeneration Annual  
Quotes for the District's Arsenic Treatment Media**

**Synopsis**

The Board is being requested approve the Water Treatment Media Regeneration Annual Quote for the regeneration of the District's Arsenic treatment media and award the regeneration service to Purolite.

**Background**

In January of 2006 EPA lowered the Maximum Contaminant Level of Arsenic in drinking water from 50 ppb to 10 ppb. At that time two of the District's Hub wells #3 and #1 had Arsenic levels greater than 10 ppb. Since then the District acquired Metro Southwest that has Arsenic treatment systems at Diablo Village No. 1 and Lazy B. The District operates and maintains 4 Arsenic treatment systems. All 4 use the Layne RT regenerable media.

**Issues**

The Layne RT media is an Iron Oxide adsorption media. As the water flows through the media the arsenic ions, along with other competing ions such as silica, phosphate, and vanadium, stick to the media. Regeneration is scheduled when there is no longer any room for additional ions to attach to the media. The regeneration process chemically strips the Arsenic and other ions from the media. The media is then processed cleaned and certified back to NSF 61 standards for drinking water and can be reinstalled in the treatment system. All drinking water components are required to meet the NSF 61 standard. The facility performing the regeneration process has to have the Water Quality Gold Seal Certificate for the product being regenerated to meet NSF 61.

District staff sent out requests for sealed bids for the Annual Quotes. Requests were sent to Purolite as the only known vendor with the Gold Seal Certification and who has the capability to perform this service for the Layne RT media. An advertisement was placed in the Territorial on April 10, 2017 and ran for four consecutive days. Sealed bids were due by 2:00 p.m. on April 27, 2017.

Purolite was the only respondent to the bid request. Purolite provided regeneration costs for varying quantities of media. The bid results are attached for reference and review. The District

has five vessels that contain 80 cubic feet of media. Using 80 cubic feet of media as an example; the cost of regeneration, assuming the high range shipping costs, would be \$245 per cubic foot or \$19,600 per vessel. Applicable taxes are already included in the pricing. It is currently anticipated that two 80 cubic foot vessels and one 157 cubic foot vessel (Diablo Village No. 1) will need to be regenerated under this annual quote

The usage of this annual quote will be on an as needed basis when regeneration is required. Where possible staff intends to coordinate multiple regenerations at the same time to lower the quantity rate. Funding for the regenerations will be from the appropriate line item in the approved Budgets.

**Staff Recommendation**

It is recommended by staff that the Board approve the annual quote for Water Treatment Media Regeneration and award Purolite the regeneration of the District's Arsenic Treatment Media.

**Suggested Motion**

I move to approve the annual quote for Water Treatment Media Regeneration and award Purolite the regeneration of the District's Arsenic Treatment Media.

Respectfully submitted,

Steven D. Shepard,  
Utility Superintendent

I concur with the above-noted recommendation.

Respectfully submitted,

Joseph Olsen, P.E.  
General Manager