

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

**July 8, 2013**

**Renewal of Interim Remedial Action Contract between the Arizona Department of  
Environmental Quality and the District for the South Shannon Treatment System**

**Synopsis**

The Board of Directors is requested to approve an Amendment No. 24 for the District to extend the Interim Remedial Action Contract with the Arizona Department of Environmental Quality (ADEQ) on the District's treatment system at the South Shannon Facility. The current contract expired on June 30, 2013. The contract renewal period is from July 1, 2013 to June 30, 2014. ADEQ will provide a separate amendment for the District to receive reimbursement on operation and maintenance costs.

**Background**

State legislation was passed in 1996 to enhance the State's Superfund clean-up program. The program budget has an annual legislative cap of up to \$18 million dollars for clean up of groundwater and soil contamination sites. Since, the program was not fully functional by late 1997; the District expended its own funds to install a wellhead aeration treatment system at South Shannon in June 1997. The treatment system was implemented to capture migrating volatile organic compounds (VOCs) in order to prevent the groundwater plume migrating to other District wells.

The Arizona Department of Environmental Quality (ADEQ), acting in part to the District's previous requests, designated the Shannon Road-Rillito Creek area as a State Superfund Site on April 23, 1999. Since that time, efforts by ADEQ have proceeded to determine the source and extent of the contamination. The ADEQ was expected to complete its site investigation by June 30, 2009, but State budget problems have delayed the report to the fall of 2013. Two known drinking water supply wells bisected by Rillito Creek have been impacted by the VOCs in the groundwater. One is an inactive City of Tucson well and the other is Metro's South Shannon well.

Prior to the beginning of the superfund investigation, ADEQ informed District staff of our eligibility to seek reimbursement for operational and maintenance or improvement costs associated with the District's treatment system. The Board approved a reimbursement agreement (Interim Remedial Action Contract) with ADEQ which became effective since February 4, 2000.

As previously reported, VOC levels at South Shannon Well increased over time beyond the capacity of the aeration system. Rising concentrations reduced the effectiveness of the aeration system and its use was terminated in April 2004 until a new treatment system began operation in July 2006.

**Issues**

The Interim Remedial Action Contract allows the District to annually recover costs for the operational and maintenance (O&M) or improvement costs associated with treatment system. These expenses are generally paid quarterly to the District from ADEQ through the State Superfund Program, also called Water Quality Assurance Revolving Fund (WQARF). The contract amendment is from July 1, 2013 to June 30, 2014. Past operation and maintenance expenses for the new treatment system can be found on Table 1. The worse case operations and maintenance expenditures for FY2012/2013 total up to \$150,000 based on ADEQ's projected O&M cost of \$37,500 per quarter. Actual annual costs have been much lower as shown below. This amendment is for extending the contract period. ADEQ will issue another amendment for reimbursements.

Table 1 – Annual Operation and Maintenance Costs at South Shannon Groundwater Treatment System

Year	South Shannon Pumpage (ac-ft)	Electric Costs	Personnel Costs	Lab Costs	GAC Replacement	Misc.	Total	Lbs of VOCs Removed	Cost Per 1000 Gal
							O&M Cost		
2012	667.7	\$2,467.21	\$10,880.73	\$16,832.50	\$73,692.82		\$103,873.26	45.5	\$0.48
2011	578.2	\$3,447.24	\$10,546.81	\$21,333.75	\$72,628.77		\$107,956.57	30.2	\$0.57
2010	683.9	\$3,944.46	\$10,949.17	\$24,130.90	\$73,500.88		\$112,525.41	40	\$0.50
2009	642.2	\$3,595.94	\$10,925.72	\$23,793.10	\$77,419.61	\$0.00	\$116,376.57	40.5	\$0.56
2008	687.4	\$4,648.16	\$15,745.74	\$22,039.50	\$47,061.43	\$0.00	\$90,182.23	54.3	\$0.40
2007	598.6	\$3,095.95	\$12,015.73	\$18,742.80	\$76,398.75	\$75.34	\$110,927.17	38	\$0.57
2006	137.3	\$1,100.26	\$3,948.11	\$7,560.00	\$0.00	\$2,393.08	\$15,138.75	16.8	\$0.34
2005	0	\$0.00	\$416.89	\$644.40		\$0.00	\$1,061.29	0	#DIV/0!
2004	51	\$1,757.58	\$2,750.63	\$4,336.40		\$0.00	\$8,895.61	4.1	\$0.54
2003	182.1	\$9,656.72	\$10,605.61	\$14,547.50		\$0.00	\$34,991.93	12.4	\$0.59
2002	217.8	\$8,890.05	\$15,640.23	\$11,108.20		\$0.00	\$35,856.28	12.9	\$0.51
2001	184.9	\$7,429.41	\$12,422.90	\$6,139.00		\$0.00	\$26,176.21	8.5	\$0.43
2000	426	\$10,353.02	\$13,889.88	\$3,740.00		\$0.00	\$28,408.90	18.4	\$0.20
<b>TOTALS</b>	5,116	\$57,918.79	\$119,857.42	\$158,115.55	\$347,009.44	\$2,468.42	\$688,496.92	276.1	\$0.41

**Recommendation**

Staff recommends that the Board of Directors approve Amendment No. 24 for renewing the contract period from July 1, 2012 to June 30, 2014 through the Interim Remedial Action Contract at the South Shannon Facility between the Arizona Department of Environmental Quality (ADEQ) and the Metropolitan Domestic Water Improvement District.

**Suggested Motion**

I move to approve Amendment No. 24 of the Interim Remedial Action Contract at the South Shannon Facility between the Arizona Department of Environmental Quality and the Metropolitan

Board of Directors Meeting  
July 8, 2013  
Renewal of IRA Agreement with ADEQ  
Page 2

Domestic Water Improvement District to renew the contract period from July 1, 2013 through June 30, 2014.

Respectfully Submitted,

Warren Tenney  
Assistant General Manager

I concur with this recommendation.

Respectfully submitted,

Mark R. Stratton, P.E.  
General Manager