

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

**July 11, 2011**

**Award of Contract for Synthetic Organic Chemicals (SOCs) Analysis**

**Synopsis**

The Board of Directors is requested to award an analytical services contract for Synthetic Organic Chemical (SOCs) analyses to MWH Laboratories, A Division of MWH Americas, Inc. This is to ensure that the District complies with the required monitoring under the Arizona Department of Environmental Quality Drinking Water Rules.

**Background**

According to the Arizona Department of Environmental Quality (ADEQ) Drinking Water Rules, the District must monitor for regulated Synthetic Organic Chemicals for two non-consecutive quarters once every three years unless a waiver exists for existing sampling locations. The District must monitor for both Unregulated and Regulated Synthetic Organic Chemicals for new Source Water samples, and for four quarters with no detections for new sampling locations. Synthetic Organic Chemicals (SOCs) are man-made chemicals consisting of PCB's (Polychlorinated Biphenyls), pesticides and herbicides. These contaminants are listed on the attached proposal. If an SOC is detected at less than the drinking water MCL (Maximum Contaminant Level), the District must monitor for a minimum of two consecutive quarters until the results are below the MCL. If an SOC is detected at the MCL or greater, the District must monitor at least four consecutive quarters until results are below the MCL. MCL values are provided in the attached proposal. The District monitors SOCs at 21 active Entry Points into the Distribution System (EPDSs) within the District's Metro-Main Service area. The ADEQ MAP program monitors for SOCs at the District's Metro-Hub and Metro-South West Service areas, but the District would be responsible for the SOC monitoring in these Service areas should a detection occur. Currently, the District has monitoring waivers for the 2009-2017 monitoring Cycle at all of its active EPDS' for the Metro-Main Service area. However, samples will be required for any new wells/EPDS', and ADEQ does have the right to revoke the monitoring waivers if it chooses to do so. An Entry Point into the Distribution System (EPDS) is the point at which water is discharged from a well, storage tank, reservoir or pressure tank into the distribution system, prior to any service connection.

**Issues**

The District published a request for proposals from laboratories for Synthetic Chemical Analyses in the Daily Territorial on April 11, 12 and 13, 2011. Eight laboratories were sent the proposal package

(see attached), and five proposals were received. The proposals received were from MWH Laboratories, A Division of MWH Americas, Inc. (A full service laboratory and office in Scottsdale, Arizona and a main office and laboratory in Monrovia, California. MWH also has several other laboratories within the USA); TestAmerica Laboratories, Inc. (A limited service office/lab in Tucson, AZ and a full service laboratory in Phoenix, AZ. TestAmerica also has several other laboratories within the USA.); Columbia Analytical Services, Inc. (A limited service office/lab in Tucson, AZ and a full service Laboratory in Kelso, WA); Turner Laboratories, Inc. (A Tucson, AZ based Laboratory and office); and XENCO Laboratories (a limited office/lab in Tucson and full service Laboratory in Phoenix, AZ). The selection of a laboratory is made by rating each laboratory according to quality assurance/quality control (QA/QC), method detection limits (MDLs), costs, turnaround time, references, certification, insurance coverage and other pertinent factors such as methods used and laboratory reports.

Issues arose mainly with the costs and method detection limits (MDLs). Costs were derived from the cost of all SOC constituents that would be monitored at the District's active EPDS'. The total number of samples per year is subject to a detection, monitoring waivers, new well installation, or if the District decides to increase the number of samples taken.

District staff reviewed the analytical contract proposals and had MWH Labs with the highest Total Score from Table 1, the best Cost Ranking from Table 2, and the best Method Detection Limits (MDLs) Ranking from Table 3. MWH also had the best QA/QC and Costs ranking on Table 1. TestAmerica Labs ranked second on the Total Score for Table 1, and they also had the best rating for Professional Expertise on Table 1. However, they ranked fourth for Cost Ranking on Table 2, but TestAmerica was second on Method Detection Limits Ranking on Table 3. Columbia Analytical Services had the third best Total Score on Table 1, the third best Cost Ranking on Table 2, but Columbia ranked fourth on Method Detection Limits Ranking on Table 3. In addition, the District and its Staff would have to package, contact the shipping company, and pay for shipping samples back to the Lab in Kelso, WA should it choose to use Columbia. This would add additional costs to those already noted above in Tables 1 and 2 for sample analysis and estimated shipping. These additional costs in Staff time would outweigh any potential cost savings from using Columbia, even if the estimated shipping costs were lower. Turner Labs had the fourth best Total Score on Table 1, and ranked fifth for Cost Ranking on Table 2. Turner also ranked third for the Method Detection Limits Ranking from Table 3. XENCO Labs ranked the lowest on the Total Score from Table 1, but ranked second for Cost Ranking on Table 2. However, XENCO was last for the Method Detection Limits Ranking on Table 3.

As noted above, MWH Labs had the best ranking for MDLs on Table 3. Method Detection Limits or MDLs are important should EPA decide to lower a detection level due to health risks, or have a very low MDL for any new SOCs that may be regulated in the future. The MWH Labs also had the best Cost Ranking as noted above as well.

In the event that a QA/QC laboratory problem error occurs that requires a resample, the District requires the contracted laboratory to pay for both the original sample and resample analyses if more than three re-samples are necessary, and if they are due to a laboratory QA/QC error.

**Staff Recommendation**

Staff recommends that the Board of Directors award the contract for SOC analysis to MWH Laboratories, A Division of MWH Americas, Inc. The laboratory has the best Total Score for its proposal review, the best ranking for Costs and the best ranking for Method Detection Limits. The contract awarded to MWH Laboratories, A Division of MWH Americas, Inc. would not exceed \$15,000.00. This cost accounts for any compliance sampling, contingency sampling and sampling at Metro-Main, Metro-Hub and Metro-SW through June 30, 2012. The contract would also have the option to be extended annually for an additional two years with Board approval. In the event that MWH Laboratories, A Division of MWH Americas, Inc. is unable to perform its contracted duties, Staff recommends that TestAmerica Laboratories, Inc. be named as the back-up laboratory due to its excellent Method Detection Limit ranking, and its second best ranking for overall proposal review criteria.

**Suggested Motion**

I move to award the analytical services contract for Synthetic Organic Chemicals to MWH Laboratories, A Division of MWH Americas, Inc. for a not-to-exceed amount of \$15,000.00. The contract will expire on June 30, 2012. The contract may be extended for an additional two years annually with the Board of Directors approval. In addition, TestAmerica Laboratories, Inc. shall be the back-up laboratory to MWH Laboratory in the event they are unable to perform their contracted duties.

Respectfully submitted,

Christopher W. Hill  
Deputy Manager

I concur with the above-noted recommendation

Respectfully submitted,

Mark R, Stratton, P.E.  
General Manager

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**Table 1 – Total Proposal Review Criteria**

<b>Criteria</b>	<b>MWH Labs</b>	<b>TestAmerica Labs</b>	<b>Columbia Analytical Services</b>	<b>Turner Labs</b>	<b>XENCO Labs</b>
<b>QA/QC Score</b> (QA/QC Plan, Back-up Plan, Method Detection Limits)	24	22	15	17	12
<b>Costs</b> (Total Cost, Unit Cost, RUSH Cost)	24	18	20	12	15
<b>Professional Expertise</b> (References/Expertise, Lab and Equipment Certifications, Turn-Around Time (TAT), Lab/Office Locations)	18	20	16	18	17
<b>Lab Team</b> (Resumes/Organization Chart and Subcontractors)	5	4	4	4	2
RFP, ADEQ Forms and License Included Score	15	15	12	15	15
Insurance Requirements Score	10	10	10	9	9
<b>Total Score</b>	<b>96</b>	<b>89</b>	<b>77</b>	<b>75</b>	<b>70</b>

**Table 2 – Regular Costs**

<b>Parameter</b>	<b>MWH Labs</b>	<b>XENCO Labs</b>	<b>Columbia Analytical Services</b>	<b>TestAmerica Labs</b>	<b>Turner Labs</b>
SOCs	\$810	\$1025	\$775 plus \$200-\$250 shipping	\$1265	\$1617
Dioxin	\$250	\$350	\$235 plus \$100-\$125 shipping	\$300	\$360
<b>Unit Costs</b>	<b>\$1,060.00</b>	<b>\$1,375.00</b>	<b>\$1,310-\$1,385 with estimated Shipping, but this does not include staff time for packing and getting to shipper</b>	<b>\$1,565.00</b>	<b>\$1,977.00</b>
<b>Cost Ranking</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**Table 3 – Method Detection Limits Ranking**

<b>Criteria</b>	<b>MWH Labs</b>	<b>TestAmerica Labs</b>	<b>Turner Labs</b>	<b>Columbia Analytical Services</b>	<b>XENCO Labs</b>
<b>Method Detection Limits Ranking</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>