

THE CITY OF SAN DIEGO

REPORT TO THE CITY COUNCIL

DATE ISSUED:

September 16, 2013

REPORT NO: 13-063

ATTENTION:

Natural Resources and Culture Committee

Agenda of September 25, 2013

SUBJECT:

Agreement with Trussell Technologies, Inc., for Water Treatment

Research Consulting Services, Amendment No. 1

REFERENCE:

Resolution Number R- 304315 of the City Council authorizing execution

of the contract with Trussell Technologies, Inc., for up to \$3 million,

over a five-year period, expiring on December 10, 2013.

REQUESTED ACTION:

Authorize the Mayor, or designee, to approve Amendment No. 1 to the Agreement with Trussell Technologies, Inc., for Water Treatment Research Consulting Services to extend the expiration of the Agreement by an additional 19 months for an additional amount of \$735,000, for a new amount not-to-exceed \$3,735,000.

STAFF RECOMMENDATION:

Approve the requested actions and adopt the ordinance.

SUMMARY:

The City of San Diego Public Utilities Department's (Department) research program evaluates the most recent advances in water treatment technology and develops water quality and cost data associated with potential water supply options. The program uses Trussell Technologies, Inc. (Trussell), a local consultant with expertise in advanced water treatment, to conduct research that is primarily grant funded. Trussell is a leader in this type of research and their expertise has been invaluable to the City.

The Department's contract with Trussell was approved by City Council (Council), following a competitive procurement process. Council authorized execution of the contract with Trussell (R- 304315), for up to \$3 million, over a five-year period, from December 10, 2008 through December 2013. The City would like to amend the contract to increase the not-to-exceed amount to \$3,735,000 and extend the expiration date to July 10, 2015 in order to complete grantfunded research related to direct potable reuse (DPR). The research will be conducted at the City's Advanced Water Purification Demonstration Facility (AWPF) located at the North City Water Reclamation Plant, thus keeping the AWPF operational and open for public tours. Table 1 (attached) provides a summary of actual and anticipated contract expenditures. Approximately \$2.7 million of the new proposed \$3,735,000 total contract amount will be reimbursed through grant funding; the City's cost after grant reimbursements will be approximately \$1.1 million.

The work to be performed during the requested extension is estimated to cost \$1.1 million, and \$775,000 of it will be reimbursed through grant funding.

The Department presented the final Water Purification Demonstration Project (Demonstration Project) report to Council on April 23, 2013. The objective was to examine the feasibility of indirect potable reuse (IPR) through reservoir augmentation at the San Vicente Reservoir; it was found to be feasible. Council unanimously adopted the report and directed staff to develop a potable reuse implementation strategy that considers both IPR and DPR options. DPR would allow the purified water to be provided to a water treatment plant without first being retained in an environmental buffer, such as the San Vicente Reservoir. In the City's case, the length and cost of the purified water pipeline would be reduced. However, potable reuse is based on a multiple-barrier concept that prevents unwanted contaminants from remaining in the finished water, and it is presently unknown as to what treatment or other barriers would be required to mitigate for eliminating the reservoir barrier. Therefore the DPR-IPR cost difference is unknown.

In late 2012 the City was selected to receive \$1.2 million in Proposition 50 (Prop 50) grant funding for an Extended Testing Project at the City's AWPF. In April 2013, Prop 50 funding for the project was increased to \$2.7 million and this allowed the City to expand the scope of extended testing. Additional treatment equipment will be installed directly upstream of the AWPF's existing treatment processes. This will allow the City to evaluate the resultant treatment reliability and redundancy, and help to determine if it sufficiently mitigates for the absence of the reservoir barrier in a DPR scenario. The data developed through this Extended Testing Project will support the industry's effort to develop direct potable reuse regulatory criteria. With the increase in grant funding and testing scope, the scheduled completion has also been extended out to Spring 2015, after the current contract with Trussell expires. A contract extension is needed to complete this DPR-focused extended testing work. The total project cost is approximately \$2.7 million; the City's share is \$50,000 to cover electrical costs. Approximately \$1.9 million will be expended under the existing contract to procure and install the equipment. An additional \$775,000 will be needed to finish the testing and project report during the proposed contract extension.

Interest in DPR is statewide. Senate Bill 918 (SB 918) requires the California Department of Public Health (CDPH) to report to the Legislature on the feasibility of establishing DPR regulations by December 31, 2016. The WateReuse Research Foundation (WRRF) is leading a DPR Initiative to conduct research and develop the data that the CDPH will need to make their feasibility determination. In May 2013, the City joined the DPR Initiative per Council direction. Following the completion of the above Extended Testing, the City's AWPF will be utilized for another DPR research project that will be managed by WRRF. The City's AWPF was sought for this research because it is the only full-scale test facility in the state.

The Department would like to rely on Trussell to operate the AWPF from January – July 2015 to assure that the AWPF remains operational between the Extended Testing and WRRF's research operations. The estimated cost is \$330,000.

According to the San Diego City Charter Section 99, the term of the contract agreement cannot last longer than five (5) years unless the agreement is authorized by an ordinance. Therefore, by

the stipulation of the City Charter and by the terms of the agreement, this Amendment No. 1 is requested to extend the duration of the agreement by an additional 19 months and increase its funding limit from \$3,000,000 to \$3,735,000. The proposed new expiration date is July 10, 2015.

FISCAL CONSIDERATIONS:

Execution of this amendment will allow for additional funding of \$735,000, for a new amount not-to-exceed \$3,735,000. To date, four (4) task orders have been authorized under this Agreement totaling \$2,324,658. The additional amount of \$735,000, will be funded equally through the Water Operating Utility Fund 700011 and the Metro Sewer Utility Fund 700001. The amount that will be reimbursed through grants is approximately \$2.7 million; the City's cost after these reimbursements will be approximately \$1.1 million.

EQUAL OPPORTUNITY CONTRACTING INFORMATION (IF APPLICABLE):

This agreement is subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. 18173, Section 22.2701 through 22.2702) and Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517).

PREVIOUS COUNCIL and/or COMMITTEE ACTION:

On November 13, 2008, Council authorized the City Manager to execute the original Agreement with Trussell Technologies (R-304315).

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

The contract amendment will continue AWPF operations to support facility tours, which are a key component of potable reuse education and outreach activities.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

None.

Ann Sasaki

Interim Director of Public Utilities

Attachment: Table 1 - Summary of Contract Expenditures

Attachment

Table	e 1 – Summary of	Contract E	Expenditures
Task	Schedule	Amou	
San Pasqual Brine Study	complete	\$ 231,2	56
North City Denitrification Study	complete	\$ 46,2	64
AWPF Operations (5 months)	Mar-Aug 2013	\$ 236,4	79
Extended Testing - equipment procurement	Apr-Nov 2013	\$ 1,810,6	To be reimbursed through Prop 50 grant funding.
Total to Date	1	\$ 2,324,6	58
Move North City Electrodialysis Reversal Units	Jul-Oct 2013	\$ 70,00	Required to create space for new equipment associated with Extended Testing. To be reimbursed through grant funding.
AWPF Operations (3.5 months)	Sep-Dec 2013	\$ 160,00	Required for continuous AWPF Operations prior to the start of Extended Testing.
Develop DPR Treatment Concepts	Sep-Nov 2013	\$ 75,00	Supports Potable Reuse Project work;
Total thru December 10, 2013	7	\$ 305,0	00
Total under existing agreement		\$ 2,629,6	
Complete Extended Testing	Nov 2013 - Spring 2015	\$ 775,0	To be reimbursed through Prop 50 grant funding.
AWPF Operations (7 months)	Jan-Jul 2015	\$ 330,0	00
Projected total under agreement extension		\$ 1,105,0	Portion to be reimbursed through grant funding: \$775,000.
Projected total under extended agreement		\$ 3,734,6	Portion to be reimbursed through grant funding: \$2.7 million.