

# Staff Summary Report



**Council Meeting Date:** 04-03-2008

**Agenda Item Number:** \_\_\_\_\_

**SUBJECT:** Request to award a two-year contract to Aquatic Environmental Systems, Inc for calcium hypochlorite for City pools and an ultraviolet water treatment system, for the Cox Splash Playground to sanitize and treat the water; authorize the transfer of \$25,000 from the Rio Salado Fund balance.

**DOCUMENT NAME:** 20080403fslg03 **PURCHASES (1004-01)**

**SUPPORTING DOCS:** Yes

**COMMENTS:** (IFB #08-114) Total cost for this contract shall not exceed \$65,000 during the initial contract period.

**PREPARED BY:** Lisa Goodman, CPPB, Procurement Officer, 480-350-8533

**REVIEWED BY:** Michael Greene, CPM, Central Services Administrator, 480-350-8516  
Mark Richwine, Parks and Recreation Manager, 480-350-5325  
Chris Salomone, Community Development Manager, 480-350-8294

**LEGAL REVIEW AS TO CONTRACT FORM ONLY:** N/A

**FISCAL NOTE:** Sufficient funds have been appropriated in Parks and Recreation account 2533-6310 for the calcium hypochlorite pellets. Community Development requests authorization to transfer \$25,000 from the Rio Salado Capital Projects Fund fund balance to account 6501759-6320 (Tempe Beach Park Enhancements) for the ultraviolet water treatment system.

**RECOMMENDATION:** Award the contract and authorize the transfer.

**ADDITIONAL INFO:** Invitation for Bid #08-114 was issued to establish a contract for the supply of calcium hypochlorite for City pools and an ultraviolet water treatment system for the Cox Splash Playground. Two vendors responded to the Invitation for Bid. An evaluation committee comprised of Community Development, Parks and Recreation and Procurement staff reviewed the responses. The committee's recommendation is to award the contract to Aquatic Environmental Systems, Inc, the lowest, responsive and responsible vendor meeting all requirements of the bid.

The ultraviolet water treatment system will be installed at Cox Splash Playground to sanitize and treat the water.

## Vendor's Bid Offer

It is REQUIRED that Bidder COMPLETE, SIGN and SUBMIT the original of this form to the City Procurement Office with the bid response offer. An unsigned "Vendor's Bid Offer", late bid response and/or a materially incomplete response will be considered non-responsive and rejected.

Bidder is to type or legibly write in ink all information required below.

Bidder's Company Name	<u>Aquatic Environmental Systems, Inc.</u>		
Company Mailing Address	<u>1733 E. McKellips Rd., Suite 108, Tempe AZ 85281</u>		
Company Street Address	<u>Same</u>		
Bid Offeror Contact	<u>Ralph Vatalaro</u>	Title	<u>President</u>
Contact's Phone No.	<u>480-947-3400</u>	E-mail Address	<u>rvatalaro@acs-sw.com</u>
<b>Bidder's Company Tax Information:</b>			
Arizona Transaction Privilege (Sales) Tax No.	<u>07-2797744</u>	or	
Arizona Use Tax No.	_____		
Federal I.D. No.	<u>86-0462380</u>		
City & State Where Sales Tax is Paid	<u>Tempe</u>		<u>Arizona</u>

### THIS BID IS OFFERED BY

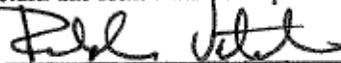
Authorized Bid Offeror (Type or Print in ink) Ralph Vatalaro

Bid Offeror's Title (Type or Print in ink) President

Date 3/5/08

### REQUIRED SIGNATURE OF AUTHORIZED BID OFFEROR (Must Sign in Ink)

By signing this Bid Offer, Bidder acknowledges acceptance of all terms and conditions contained herein and that prices offered were independently developed without consultation with any other bidder or potential bidder. Failure to sign and return this form with bid response will result in a non-responsive bid response.

  
Signature of Authorized Bid Offeror

3/5/08  
Date

Form 201-B (IFB)  
(H/IFB 3-2002)

## Specifications

### Item 1: Calcium Hypochlorite Pellets

Listed below are the minimum specifications for calcium hypochlorite pellets. Any exceptions to the specifications must be explained.

Requirement	Vendor Response		
	Yes	No	Exceptions
1. Shall be Pulsar pellets.	✓		
2. Shall be supplied in a minimum 66% concentration.	✓		
3. Shall be supplied in 50 lb. buckets.	✓		
4. Shall be non-scale inhibitor-type briquette.	✓		
5. Shall be compatible with the City's existing system (Pulsar System 1, 3, or 4).	✓		

#### Quantity

The estimated annual quantity for calcium hypochlorite pellets is 390 50-lb buckets.

#### Delivery

Deliver to each City facility within 24 hours after receipt of order shall be included. Normal operating hours are Monday thru Friday from 8:00 a.m. until 5:00 p.m., excluding weekends and holidays.

#### Repairs

Contractor shall repair chlorinator units within 8 hours after notification by the City to avoid operational outages.

**Item 2: Ultraviolet Water Treatment System for Pool**

Listed below are the minimum specifications for an ultraviolet water treatment system for pool. Any exceptions to the specifications must be explained.

Requirement	Vendor Response		
	Yes	No	Exceptions
<p><u>Ultraviolet Disinfection Equipment:</u> Shall operate within the UVC electromagnetic spectrum emitting wavelengths in the range of 200nm to 400nm. This required wavelength will provide constant disinfection/inactivation of bacteria, algae, molds, viruses and destruction of Monochloramines, Trichloramines, and Dichloramines. The UV System shall have an MET or equivalent (ETL, CSA, or UL) listing, and be NSF-50 certified.</p>	✓		
<b>Equipment General Description:</b>			
<p>1. The Ultraviolet System shall be provided in a complete package to include: 316L Stainless Steel Chamber, Control System located in a NEMA 12 rated panel, Medium Pressure Bulb(s) designed to emit wavelengths within the UVC electromagnetic spectrum, strainer basket, automatic wiper system, and Project Commissioning by a Certified Ultraviolet Technician.</p>	✓		
<b>Unit Type:</b>			
<p>1. Ultraviolet manufacturer to offer unit capability of a Horizontal or Vertical installation application using state of art design and direct flow through characteristics. Direct flow will be required in order to reduce total head loss through the system. Unit shall be a two Lamp medium pressure system with two (2) bulb of 2.0kW power rage. Multiple lamp system is required in order to maintain quality disinfection in the event of a single bulb failure. Electrical requirements to include 480 volt 3-phase 20 amp external breaker. All required electrical work to be performed by licensed electrician.</p>	✓		
<p>2. The Ultraviolet System shall be sized to emit a minimum dose of 60mj/cm<sup>2</sup>, with flow rates of 450 gpm, within a 6" schedule 80 PVC pipe.</p>	✓		
<p><u>Ultraviolet Chamber:</u> Shall be pressure rated for 100 psi (tested to 150 psi), and pressure drop across the unit will be minimal. The unit shall be constructed of 316L stainless steel to prevent corrosion within the harsh pool environment. The Ultraviolet chamber shall come complete with the following equipment:</p>	✓		
<p>1. Ultraviolet intensity monitor with built-in alarm system to notify operator when output level drops below required level of 60 mj/cm<sup>2</sup> (or operator set dosing levels).</p>	✓		
<p>2. Ultraviolet temperature control system shall be provided to maintain system integrity in the event of flow interruptions to the chamber.</p>	✓		
<p>3. Ultraviolet chamber shall come complete with annealed quartz sleeve with "O" ring seals for water tightness.</p>	✓		

Requirement	Vendor Response		
	Yes	No	Exceptions
4. Chambers shall be complete with ANSI flanges and all ports or vents shall be threaded NPT. The Ultraviolet chamber must be capable of installation in the system so that it remains full under all conditions.	✓		
5. The Ultraviolet unit must be complete with appropriate brackets or feet for ease of installation.	✓		
<u>Ultraviolet Lamps</u>			
1. Ultraviolet lamps shall be medium pressure high intensity. Lamp shall be designed to emit continuous Ultraviolet wavelengths in the range of 200nm to 400nm. This will provide optimal disinfection benefits and destruction of the Monochloramine, Dichloramine, and Trichloramine compounds. Lamp must remain unaffected by temperature variance of 0 degrees to 200 degrees Fahrenheit.	✓		
2. The lamp unit must provide a dose not less than 60 mj/cm <sup>2</sup> at the end of the lamp life and this must be based on the full recirculating flowrate, not on a sidestream treatment.	✓		
<u>Automatic Wiper System:</u> An automatic cleaning system shall be provided for cleaning of quartz sleeve and Ultraviolet monitor probe. The system shall travel the entire length of the quartz sleeve twice per desired cleaning cycle. Precision molded wiper rings shall be provided to ensure thorough quartz tube cleaning and quartz tube protection. Wiper cycle shall be user selectable and adjustable within a range of 15 minutes to 24 hours depending on anticipated application and deposit build-up.	✓		
<u>Ultraviolet Control System:</u> Control cabinet shall be epoxy coated NEMA 12 rated cabinet. Three levels of operation shall be provided to meet the needs of the operator and pool environment: Simple Control (start, stop, and reset), Full Parameter Display, and Customized Operator Configuration. Modes of operation shall be password protected to secure system critical setup functions. Control system shall have clearly identifiable start, stop, and reset control buttons (suitable for gloved operation) with Running and Fault LCD indicators.	✓		
1. Two line LCD screen shall display a minimum of the following: Ultraviolet dose (derived from flow and intensity inputs), Ultraviolet intensity (as a % and mj/cm <sup>2</sup> ), Lamp Current, Flow rate (accepts signal from optional flow meter – displayed as gallons per minute), Chamber temperature (displayed as deg. F), Operation hour meter, System spares listing, Lamp fault, low Ultraviolet & temperature alarm, Ground fault trip, Wiper fault. All alarm functions shall have simple text message display to assist in fault finding.	✓		
2. Control system shall have a minimum of the following system interface control: Remote operation, Process interrupt features (from valves, flow meters), Low UV dose (configurable to shutdown or alarm only), Flow meter input, Auto-Restrike, Half to full power Ultraviolet setting with 24 hour/7day settable timer.	✓		

Requirement	Vendor Response		
	Yes	No	Exceptions
3. Control system shall have built in date-logging capabilities to record the following information: Ultraviolet intensity required, Ultraviolet intensity measured, Lamp current, Chamber temperature, Flow rate (if flow meter is connected), Time and date stamp, All alarms generated.	✓		
<u>Project Commissioning:</u> Ultraviolet Chamber and Control Panel shall be commissioned by a qualified factory trained technician. During this time period, final electrical and control cabling will be connected from the Spectra control cabinet to the Ultraviolet disinfection chamber. Daily operation and simple maintenance instructions shall be provided during this commissioning process. A factory trained representative of the manufacturer shall perform all warranty work. Manufacturer to warranty Ultraviolet chamber and Control panel for a period of twelve (12) months. Medium pressure Ultraviolet bulbs shall be warranted for a period of 4,000 hours. Intermittently operated bulbs (≥1 on/off cycle per day) will be replaced free of charge should failure occur prior to 3,000 hours and replacement will be prorated between 3,000 and 4,000 hours. A detailed warranty sheet shall accompany this document upon request.	✓		

## Bid Questionnaire

1. What is the address of your local facility that provides the product requested?

1733 E. McKellips Rd., Suite 108, Tempe AZ 85281

2. Who is the local contact to be assigned to our account if awarded the contract?

Dan Tryon

3. What is the estimated delivery time after receipt of order?

Item 1 1 days

Item 2 30 days

4. List three references using the proposed product(s).

Reference for Calcium Hypochlorite Pellets:

Company	Contact Person	Telephone #
<u>Town of Gilbert</u>	<u>Sean Carlin</u>	<u>(480) 503-6250</u>
<u>City of Scottsdale</u>	<u>Ken Shoup</u>	<u>(480) 312-4005</u>
<u>City of Apache Junction</u>	<u>Keith Graves</u>	<u>(480) 671-5155</u>

Reference for Ultraviolet Water Treatment System for Pools:

Company	Contact Person	Telephone #
<u>Pim County Parks &amp; Recreations</u>	<u>Joe Barr</u>	<u>(520) 877-6160</u>
<u>Carlsbad Schools</u>	<u>Tom Duffin</u>	<u>(505) 361-4599</u>
<u>Bend Metro Parks</u>	<u>Matt Mercer</u>	<u>(541) 389-7665</u>

Company Name: *Aquatic Environmental Systems, Inc.*

**PRICE SHEET**

ITEM NO.	DESCRIPTION OF REQUIRED MATERIAL, SERVICE OR CONSTRUCTION	QTY	UNIT	UNIT PRICE	EXTENDED PRICE
1.	Calcium Hypochlorite Pellets	390	50# Pail	\$ <u>79.50</u>	\$ <u>31,005.00</u>
2.	Ultraviolet Water Treatment System for Pool	1	System	\$ <u>19,666.59</u>	\$ <u>19,666.59</u>
	<i>ENGINEERED TREATMENT SYSTEMS SA-13-4</i>				
	Manufacturer/Model Number				

(FOB Destination Pricing)

\* Applicable Tax 8.1 %

\* State correct jurisdiction to receive sales tax on the Vendor's Bid Offer, form CS-P201 (B) included in this Invitation for Bid document.

Less prompt payments discount terms of — % — days or Net 30 days. (To apply after receipt and acceptance of an itemized monthly statement.) For bid evaluation purposes, the City cannot utilize pricing discounts based upon payments being made in less than 30 days from receipt of statement.

Ordering and Invoice Instructions

In order to facilitate internal control and accounting, each City Department will order and must be invoiced separately. Monthly invoices must be segregated by City Department number and mailed or delivered directly to the City Customer Department. For most materials, there will be between three - (3) and six - (6) ordering departments. At the time an order is placed, the contractor must obtain the ordering department's cost center numbers for billing purposes. The use of the department's cost center numbers will be in addition to the purchase order number. Once a month, the contractor shall submit a consolidated statement which shall itemize the invoice numbers, invoice date, invoice amounts, and the total amount billed to Accounting. Discount offering will be based upon days from receipt of the consolidated monthly statement. Invoice(s) shall not show previous balances.

Invoices shall include:

1. Listing Of All Delivery/Pickup Receipt Numbers Being Invoiced.
2. Total Cost Per Item.
3. Applicable Tax.
4. Payment Terms.
5. Blanket Purchase Order Number.

Invoices that do not follow the above minimum invoicing requirements will not be paid. Payment must be applied to only invoices referenced on check/payment stub. The City reserves the right to bill contracted vendor for researching invoices that have been paid, but not properly applied by vendor account receivables office.

Statement mailing address: City of Tempe  
Accounting (see below for your contact)  
P.O. Box 5002  
Tempe, Arizona 85280

Accounting Contacts: Cecilia Miller Letters A-C  
Ramona Zapien Letters D-O  
Penny Brophy Letters P-Z

## Addendum to Solicitation



City Procurement Office/City of Tempe • PO Box 5002 • 20 East 6th Street • Tempe, AZ 85280 • (480) 350-8324 • www.tempe.gov/purchasing

This addendum will modify and/or clarify:

Solicitation No.: | 08-114

and is

Addendum No. | 1

Procurement Description: | Calcium Hypochlorite and Ultraviolet  
Water Treatment System

Changes should be made as follows:

**Add:** Page 21, Equipment General Description

2. The Ultraviolet System shall be sized to emit a minimum dose of 60 mj/cm<sup>2</sup>. Electrical requirements to include 480 volt 3-phase 20 amp external breaker. All required electrical work to be performed by licensed electrician.

**Delete:** Page 21, Unit Type

1. Ultraviolet manufacturer to offer unit capability of a Horizontal or Vertical installation application using state of art design and direct flow through characteristics. Direct flow will be required in order to reduce total head loss through the system. Unit shall be a two Lamp medium pressure system with two (2) bulb of 2.0kW power rage. Multiple lamp system is required in order to maintain quality disinfection in the event of a single bulb failure. Electrical requirements to include 480 volt 3-phase 20 amp external breaker. All required electrical work to be performed by licensed electrician.
2. The Ultraviolet System shall be sized to emit a minimum dose of 60mj/cm<sup>2</sup>, with flow rates of 450 gpm, within a 6" schedule 80 PVC pipe.

The balance of the specifications and bid solicitation instructions to remain the same. Bidders/Proposal Offerors are to acknowledge receipt and acceptance of this addendum by returning of signed addendum with bid/proposal response. Failure to sign and return an addendum prior to bid/proposal opening time and date may make the bid/proposal response non-responsive to that portion of the solicitation as materially affected by the respective addendum.

*Aquatic Environmental Systems, Inc.*  
NAME OF COMPANY

*Ralph Vatalaro, President*  
BY NAME (please print) TITLE

*1733 E. McKellips Rd, #108*  
ADDRESS (or PO Box)

*(480) 947-3400*  
TELEPHONE

*Tempe, AZ 85281*  
CITY STATE ZIP

*Ralph Vatalaro*  
AUTHORIZED SIGNATURE