



REVISED ADDENDUM NUMBER ONE  
ORIGINALLY DATED 4/1/19  
REQUEST FOR PROPOSALS (RFP)

DATE: April 2, 2019  
TO: ALL PROPOSERS OF RECORD  
FROM: LYN MAJESKI, PURCHASING MANAGER  
RFP FOR: CHLORINATION SYSTEM FOR OAK RIDGE OUTDOOR POOL

This Addendum forms a part of and modifies the RFP for the above item that needs to be received by April 8, 2019 at 2:00 p.m. (local time) at the City of Oak Ridge. Central Services Complex, 100 Woodbury Lane, Oak Ridge, Tennessee.

ITEM 1 – Questions/Statements from Potential Proposers:

1. **Question:**

Are site visits for design and installation considerations allowed in advance of the bid submittal?

**Response:**

Yes.

2. **Question:**

There are only a couple of manufacturers that produce equipment capable of meeting the capacity requirements of the outdoor pool with regard to Available Chlorine. "Brand X" produces erosion feeders and "Brand Y" produces spray feeders. By excluding erosion feeders, you are essentially left with (1) brand/option and no leverage. Erosion feeders are generally recognized as being more reliable and requiring far less maintenance than spray feeders. They are utilized at major waterparks and aquatic centers. What are the reasons for excluding Erosion feeders?

**Response:**

Having utilized erosion feeders, spray feeders, and liquid feeders throughout my career; it is my professional opinion that spray feeders will be the best option for the Outdoor pool. It is subjective to say that erosion feeders require less maintenance. We ask for references of

facilities that brand x or y have been installed and maintained by the bidder. To expound on my professional opinion, I also researched many other facilities to determine what they use in their operation. Locally, all University of Tennessee at Knoxville pools and all YMCA's of Knoxville and Chattanooga utilize spray feeder technology. For a comparable size pool, Wet and Wild of North Carolina with 2.1 million gallons, uses a spray feeder technology. Globally, Sea World and Disney also use spray feeder technology.

### 3. Question:

By converting to Calcium Hypochlorite, I would conservatively estimate the City to realize an increase of chlorine cost by a factor of 8-10 times over gas depending on actual price of Calcium Hypochlorite. It would seem that the best value for the City would be to consider the cost of the chemical as the primary determining factor in who is awarded the bid and the feeder equipment/installation as secondary based on its relative insignificance in the overall cost of conversion. Additionally, the feeder equipment is tied to its particular brand of chemical in order to retain its NSF/ANSI rating. By focusing on a particular brand or design of equipment, the City could lose its ability to negotiate a favorable chemical price. Does the price of chemical have any bearing on the award of the bid? See cost comparisons below.

### Response:

Chemical cost is a factor. Gaseous chlorine would have been the most economical route of sanitation. All forms of chlorine require a risk management system. Dollywood converted from liquid to cal hypo due to spillage risk involved, Wilderness at the Smokies is in the process of conversion for the same reason. Liquid has not been an effective form of sanitation for very large pools such as the Oak Ridge Outdoor pool with 2.2 million gallons of water. Having used liquid in my career, a cal hypo feeder was necessary as a backup during high bather load days. It is not in our best interest due to our size, bather load, and proximity to a fresh water spring to use liquid. Cal Hypo is the most commonly used form of chlorine in pools. Often time's municipalities can utilize an annual State bid award for bulk pricing.

### 3 Common Aquatics Chlorine Options - Cost Comparison:

**Elemental Chlorine (Gas): \$0.465/LB x 2000 LBS/Week x 16 Weeks = \$14,800/Season**

*(Pros: Most Economical; Cons: Extremely Hazardous, Requires Risk Management Plan and Security, Some pH adjustment possible)*

**Sodium Hypochlorite (Liquid): \$1.70/GAL x 1600 GAL/Week x 16 Weeks = \$43,500/Season**

*(Pros: Offers the best overall value for the City, can be housed in existing chlorine building and out of view of guests, inexpensive storage and feed pumps are all that is required to convert, no chemical handling; Cons: Product degrades, some pH adjustment likely required).*

**Calcium Hypochlorite (Solid): \$2.50/LB x 3000 LBS/Week x 16 Weeks =  
\$120,000/Season**

*(Pros: Requires minimal pH adjustment, offers improved stability over liquid, requires daily chemical handling (50# Pails); Cons: Most expensive chemical, complex and expensive feed system, would be installed in plain view of guests and potentially unsightly).*

**\*\*\*\*\* Acknowledge receipt of this Addendum with your Proposal \*\*\*\*\***

**If you have already submitted your bid you may acknowledge receipt by email to  
lmajeski@oakridgetn.gov**