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The Pool Safety & Sanitation  
Newsletter of the Alexandria  
Health Department

The Lifeline

## Getting to Know Your EHS

### Pool Program Coordinator

Michele Howard

Aquatic Health Coordinator

Michele is pleased to serve as the aquatic health coordinator for 2012. Michele gained valuable knowledge regarding aquatic facilities during her extensive public health tenure evaluating regulated facilities in Florida. Although you might not see Michele at your pool this summer, she nevertheless will be kept well informed about pools by our seasonal pool specialists.



### Seasonal Pool Specialist

David Weber

Environmental Health Specialist

David rejoins the pool program again after working the past four summers as an aquatic health specialist with the Alexandria Health Department. David looks forward to greeting new members of the aquatics community, working also with many familiar faces, and helping Alexandrians maintain the highest standards of aquatic health in the nation.

### Seasonal Pool Specialist

Adam Dalke

Environmental Health Specialist

Adam has joined the aquatic health program for the 2012 season. Prior to moving to Alexandria, he worked and studied in Wichita, Kansas and earned a B.A. Field Major degree in chemistry, biology, and physics. He is very excited to work with the pool management companies, the pool operators, the lifeguards, and the Alexandria Health Department which make Alexandria such a great place to safely enjoy recreational water.



Your aquatic facility will be inspected every two weeks by one of the environmental health specialists. They will have a City of Alexandria identification card and will identify themselves to you on arrival. During the inspection they will check the facility to ensure proper sanitation and to ensure the facility is safe for patrons and staff. They may also ask you questions about the operation of the facility. If you have any questions about the inspection process, inspection results or regulations, you may ask them directly, or call Michele Howard at (703) 746-4868.

## Water Quality Placards and Record Keeping

Water quality placards are boards that are permanent, durable, and waterproof. They show water quality test results and the minimum/maximum standards for water quality that the pool operator must maintain. Water quality results must be legibly posted and the readings should be the most recent results including the date and time of day for the results. If the pool is heated, the water temperature shall also be posted. The water quality placard must be posted in a location where it is readily observable by the pool patrons.

In addition to updating the water quality placard, keeping records of water quality is an important part of being a certified pool operator. Throughout the day, the free chlorine residual (or bromine residual) and pH results should be recorded at least once every two hours the pool is in operation. Readings for both influent and effluent pressure as well as the flow rate should also be observed every two hours and recorded at least two times per day. **Total alkalinity and calcium hardness tests shall be performed and recorded at least weekly, and for pools utilizing cyanuric acid, testing shall also be performed and recorded weekly.** Other records that are mandatory are dates and times of backwashes and dates, times, type and amount of chemicals added to the pool (unless the chemicals are being continuously added with a chemical feeder—then only document type of chemical). It is important that these readings are up-to-date and legible as they must be available for inspection at all times the pool is in use.

**“Insufficient disinfectant in a pool or spa may lead to algae, cloudy water, and/or water-borne illness.”**

## Disinfectant Levels and Water Balance

Another aspect of complying with the City of Alexandria Aquatic Health Ordinance is maintaining proper disinfectant levels. Pool operators should familiarize themselves with the required levels and ensure that the disinfectant (chlorine or bromine) remains within the acceptable range at all times. Pool operators who are unsure of the acceptable levels should call their supervisor or speak with an Environmental Health Specialist. There may be times during the summer when the disinfectant residual falls below the acceptable range. Insufficient disinfectant in a pool or spa may lead to algae, cloudy water, and/or water-borne illness. The steps taken to correct these problems are very important in order to prevent illness and poor sanitation from occurring in recreational waters. If the disinfectant is too low, ensure there are no bathers in the pool. Adjust the disinfection device to increase the disinfectant level. Use the test kit to test the water. When the disinfectant level has reached the minimum allowed level, bathers may be allowed back into the water. If chemicals are added to the pool by hand, the pool must remain closed for 30 minutes, even if the disinfectant level increases to an acceptable level quickly.

<b>Swimming Pools</b>	<b>Min.</b>	<b>Max.</b>	<b>Spas / Hot Tubs</b>	<b>Min.</b>	<b>Max.</b>
Chlorine (ppm)	1.0*	5.0	Chlorine (ppm)	2.0	10.0
Combined Chlorine (ppm)	0.0	0.2	Combined Chlorine (ppm)	0.0	0.2
Bromine (ppm)	2.0	4.0	Bromine (ppm)	2.0	6.0
ORP (millivolts)	650	N/A†	ORP (millivolts)	650	N/A†
pH	7.2	7.8	pH	7.2	7.8
Cyanuric Acid‡ (ppm)	0	50	Cyanuric Acid‡ (ppm)	0	50
Total Alkalinity (ppm)	60	180	Total Alkalinity (ppm)	60	180
Calcium Hardness (ppm)	150	1000	Calcium Hardness (ppm)	150	1000
TDS (ppm)	0	1600	TDS (ppm)	0	1600

*Notes: \*2.0 ppm if using Cyanuric Acid; †N/A = Not applicable; ‡Cyanuric Acid is prohibited in indoor pools and spas.*