# Guidelines for the proper care & maintenance of public swimming pools

## **Types of Bacteria:**

Properly chlorinated swimming pools can address microbes as listed below:

Germ	Time
E. coli O157:H7 Bacterium	Less than 1 minute
Hepatitis A Virus	About 16 minutes
Giardia Parasite	About 45 minutes
Crypto Parasite	About 15,300 minutes or 10.6 days†

Bacteriological quality ensures that pool water is free of coliform bacteria contamination.

# **Clarity:**

The pool water must be 0.5 or less NTU (nephelometric turbidity units) and the main drain grate must be readily visible from the pool deck.

#### **Chemicals:**

Chemicals used in controlling the quality of the pool water must be tested and approved using the National Sanitation Foundation (NSF) Standard 60 - 2005.

The following parameters must be adhered to for pool water treatment:

pH – 7.2 to 7.8.

Free chlorine residual shall be 1 milligram per liter (mg/L) to 10 mg/L, inclusive, in conventional swimming pools and 2 mg/L to 10 mg/L, inclusive, in all other type pools such as spa-type pools and interactive water fountains; bromine residual shall be 1.5 mg/L to 10 mg/L, inclusive, in conventional swimming pools and 3 mg/L to 10 mg/L, inclusive, in all other type pools. Except that, the following maximum disinfectant levels shall apply to indoor conventional swimming pools: 5 mg/L free chlorine or 6 mg/L bromine.

Cyanuric acid – 100 mg/L maximum in pools, with 40 mg/L as the recommended maximum and 40 mg/L in spa pools Quaternary ammonium – 5 mg/L maximum Copper – 1 mg/L maximum Silver – 0.1 mg/L maximum After treatment for breakpoint chlorination and algae prevention, use of the pool can be resumed when the free chlorine levels drop to 10 mg/L.

# **Testing:**

Test kits are required to be on the premises of all pools to determine free active chlorine and total chlorine using N,N-Diethyl-p-Phenylenediamine (DPD), or bromine level, total alkalinity, calcium hardness, and pH.

Test kits shall be provided if the corresponding chemicals are used: cyanuric acid, sodium chloride, quaternary ammonium and copper.

When silver is added as a supplemental disinfectant, a water analysis must be done every six months and be submitted to the department upon request.

## **Recirculation System:**

The pool recirculation system must be operated at all times when the pool is open for use. The recirculation system may be shut off three hours after the pool closes but must resume operation three hours before opening the pool. Shut down time must be controlled by a time clock. The pool water level must be maintained at an elevation suitable for continuous skimming without flooding during periods of non-use.

## **Recordkeeping Requirements:**

The keeping of a daily record of information regarding pool operation, using the Monthly Swimming Pool Report – DH 921 3/98, obtained from the local county health department, shall be the responsibility of the pool owner or operator. Customized report forms may be substituted provided they contain the appropriate information and are acceptable to the department. The completed report must reflect manually conducted pool water tests for pH and disinfectant levels at least once every 24 hours and shall be retained at the pool or submitted monthly as required by the local health department. DH 921, 3/98, may be obtained at the local county health department. For the purposes of daily testing of the pool water and keeping of the Monthly Swimming Pool Log, the requirements of Rule 64E-9.018, F.A.C., are not applicable.

Rules for public swimming pools are contained in Chapter <u>64E-9 F.A.C</u>. Pool operators are required to maintain a DAILY log on pool chemistry and operation, form <u>DH921</u>.