

Reference No.: NEA-SCD-OM-CIR-ENVHYG-003

Date: 19 October 2021

Dear Sir/Madam

## **ADVISORY TO SWIMMING POOLS LICENSEES**

### **Daily On-site Testing Requirements for pH and Residual Disinfectant Levels**

The Environmental Public Health (Licensable Aquatic Facilities) Regulations require pool licensees to conduct on-site testing for pH and residual disinfectant (Chlorine/Bromine) once daily.

2 The National Environment Agency (NEA) observed during water sampling audits that several pool licensees had not consistently conducted daily testing (such as not testing on weekends).

3 The daily testing is important to ensure that free residual chlorine is at the optimal pH range, to kill the microbes that may cause diarrheal disease and irritation to swimmers. The free residual chlorine should be maintained within the optimal pH range before the pool is opened for use.

4 Bromine shall be used only for indoor pools. Licensees of such pools are also required to carry out daily testing for total bromine level.

5 The daily testing is to be carried out in the steps below:

- a. Scoop water with the test kit;
- b. Collect from between 30 and 40 cm depth;
- c. Perform the test using the proper test kit;
- d. Record the test readings in a record book; and
- e. If reading is not within regulatory limit, contact your maintenance contractor to treat the pool and perform the test again, before opening the pool for use.

6 The daily on-site testing can be conducted by any in-house personnel, through pool maintenance contractor or laboratory personnel accredited by Singapore Accreditation Council. The test results should be recorded and kept for 12 months.

### **Revised Regulatory Turbidity Limit of 0.5 Nephelometric Turbidity Units (NTU)**

7 NEA would like to bring to your attention to the revised regulatory turbidity limit which was adopted from World Health Organisation standards. It is important to maintain acceptable turbidity limit of 0.5 NTU as the turbidity level is an indicator of filtration efficiency of the pool filtration system. High turbidity will reduce the efficacy of disinfectants to kill the microorganisms in the pool.

8 Licensees should run the filtration system 24 hours daily as it takes 4 turnover cycles (1 cycle every 6 hours) to reduce about 98% of turbidity in the pool.

9 Thank you.

JENNIFER YAP  
ASSISTANT DIRECTOR  
for DIRECTOR, SANITATION AND COMPLIANCE DIVISION  
ENVIRONMENTAL PUBLIC HEALTH OPERATIONS GROUP  
NATIONAL ENVIRONMENT AGENCY

THIS IS A COMPUTER-GENERATED LETTER. NO SIGNATURE IS REQUIRED.