Clarifications to the VSP 2011 Construction Guidelines

The following item numbers are being clarified in response to industry questions. Text from the VSP 2011 Construction Guidelines is printed first, then the clarification.

Sections with clarifications:

- 7.0 General Hygiene Facilities Requirements for Food Areas
- 17.0 Buffet Lines, Waiter Stations, Bars, and Other Similar Food Service Areas
- 19.0 Lighting
- 21.0 Waste Management
- 22.0 Potable Water System
- 26.0 RWF Showers and Toilet Facilities
- 29.0 Recirculation and Filtration Systems
- 30.0 Additional Requirements for Children’s Pools
- 31.0 Additional Requirements for Baby-only Water Facility

### 7.0 General Hygiene Facilities Requirements for Food Areas

#### 7.1 Handwashing Stations

#### 7.1 Clarification

This applies to self-service and served candy shops where employees serve candy, refill self-service containers, etc.

### 17.0 Buffet Lines, Waiter Stations, Bars, and Other Similar Food Service Areas

#### 17.0 Clarification

This applies to candy shops where consumers serve themselves from candy displays or dispensers and/or crew members serve candy to consumers and refill self-service containers.

### 19.0 Lighting

#### 19.0 Clarification

This applies to candy shops where consumers serve themselves from candy displays or dispensers and/or crew members serve candy to consumers and refill self-service containers.

### 21.0 Waste Management

#### 21.5.4 Independent

Construct BLACK WATER holding tank vents so that they are independent of all other tanks.

#### 21.5.4 Clarification

Construct wastewater holding tank vents so that they are independent of all sanitary water tanks. Wastewater tank vents can be combined with each other.
22.0 Potable Water System

22.13.1 Location of Seawater Inlets
Locate the SANITARY SEAWATER intakes (sea chests) forward of all overboard waste discharge outlets such as emergency and routine discharge lines from wastewater treatment facilities, the bilge, RECREATIONAL WATER FACILITIES, and ballast tanks.

This does not include the following:
- Discharges from DECK DRAINS on open decks.
- Cooling lines with no chemical treatment.
- Alarmed vent/overflow pipes for GRAY WATER, treated GRAY or BLACK WATER, and ballast tanks with an automatic shutoff system for SANITARY SEAWATER intake. These alarms must be visual and audible and must sound in a space that is continuously occupied.
- Alarmed emergency bilge discharge lines with an automatic shutoff system for SANITARY SEAWATER intake. These alarms must be visual and audible and must sound in a space that is continuously occupied.

22.13.1 Clarification
Discharges from the anchor chain locker are allowed forward of the sea chest if the chain is rinsed/cleaned only with sea water.

Alarmed vent/overflow pipes for heeling tanks and laundry water storage tanks with an automatic shutoff system for SANITARY SEAWATER intake are allowed. These alarms must be visual and audible and must sound in a space that is continuously occupied.

26.0 RWF Showers and Toilet Facilities

26.1 Shower Temperature
Equip showers to provide POTABLE WATER at a temperature not to exceed 43°C (110°F) during normal operations. Install the showers within 10 meters of the entrances to RWFs. The location and number of showers for multifacilities with multiple entrances will be determined during the plan review.

26.1 Clarification
The showers must be located within 10 meters of all entrances to each RWF.

29.0 Recirculation and Filtration Systems

29.10 Turnover Rates
Install recirculation pumps, filtration, and DISINFECTION equipment that have the capacity to turn over the RWF water at the appropriate rates as set forth in the table below. Ensure that TURNOVER rates may be increased based on bather load. (The maximum bather load must be based on the following factor: One person per 19 liters [5 gallons] per minute of recirculation flow.)

<table>
<thead>
<tr>
<th>RECREATIONAL WATER FACILITY</th>
<th>TURNOVER Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWIMMING POOL</td>
<td>4 hours</td>
</tr>
<tr>
<td>CHILDREN’S POOL</td>
<td>0.5 hours</td>
</tr>
<tr>
<td>WADING POOL</td>
<td>1 hour</td>
</tr>
</tbody>
</table>
### RECREATIONAL WATER FACILITY TURNOVER Rate

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Turnover Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHIRLPOOL SPA</td>
<td>0.5 hours</td>
</tr>
<tr>
<td>SPA POOL</td>
<td>2 hours</td>
</tr>
<tr>
<td>INTERACTIVE RWF or ACTIVITY POOL (&lt; 610 mm deep)</td>
<td>1 hour</td>
</tr>
<tr>
<td>INTERACTIVE RWF or ACTIVITY POOL (&gt; 610 mm deep)</td>
<td>2 hours</td>
</tr>
<tr>
<td>BABY-ONLY WATER FACILITY</td>
<td>0.5 hours</td>
</tr>
<tr>
<td>Custom installations (where above is not applicable)</td>
<td>To be determined by design engineer with VSP review</td>
</tr>
</tbody>
</table>

For a RWF in sea-to-sea mode, ensure a TURNOVER rate of once per hour.

**29.10 Clarification**

For facilities that meet the definition of more than one type of RWF, the more protective turnover rate applies. For example, if a CHILDREN’S POOL also has features of an INTERACTIVE RWF or ACTIVITY POOL, the turnover rate must be 0.5 hours.

**29.11.2 Monitoring and Recording**

Provide an automatic monitoring and recording system for the free HALOGEN residuals in MG/L (ppm) and pH levels. The recording system must be capable of recording these levels 24 hours/day.

Install chart recorders or electronic data loggers with security features that record pH and HALOGEN measurements.

Electronic data loggers must be capable of recording in increments of ≤15 minutes.

The probe for the automated analyzer recorder must be installed before the compensation or make-up tank or from a line taken directly from the RWF.

Install appropriate sample taps for analyzer calibration.

**29.11.2 Clarification**

If potable water is introduced into RWFs with recirculated water after filtration and chemistry control and the potable water combines with the RWF recirculation system, the potable water must be halogenated and pH controlled to the level required for the RWF. The resulting mixture would negatively impact the monitoring analyzer for the RWF.

**29.12.1 Installation**

Install a secondary DISINFECTION system for each CHILDREN’S POOL, INTERACTIVE RECREATIONAL WATER PLAY SYSTEM, and BABY-ONLY WATER FACILITY.

**29.12.1 Clarification**

If an ACTIVITY POOL has INTERACTIVE RWF features, such as flowing, misting, sprinkling, jetting, and waterfalls, a secondary disinfection system must be installed.
30.0 Additional Requirements for Children’s Pools

30.3 Secondary Disinfection System

30.3.4 Cleaning

Install UV systems that allow for cleaning of the lamp jacket without disassembling the unit.

30.3.4 Clarification

The lamp must be accessible without having to disassemble the entire unit. For example, it is acceptable if the lamp is accessed for cleaning by removing fasteners and/or a cover.

31.0 Additional Requirements for Baby-only Water Facility

31.3.1 Content

Install an easy-to-read permanent sign, with letters at least 25 millimeters (1 inch) high, at each entrance to the BABY-ONLY WATER FACILITY feature. At a minimum, the sign should state the following:

- This facility is intended for use by children in diapers or children who are not completely toilet trained.
- Use of this facility may put children at increased risk for illness.
- Children who have a medical condition that may put them at increased risk for illness should not use these facilities.
- Children who are experiencing symptoms such as vomiting, diarrhea, skin sores, or infections are prohibited from using these facilities.
- Children must wear a swim diaper.
- Children must be accompanied by an adult at all times.
- Ensure that children have a clean swim diaper before using these facilities. Frequent swim diaper changes are recommended.
- Do not change diapers in the area of the BABY-ONLY WATER FACILITY. A diaper changing station has been provided (give exact location) for your convenience.

31.3.1 Clarification

The letters on the sign heading must be at least 26 millimeters (1 inch) high, but all other lettering must be at least 13 millimeters (1/2 inch) high.

Because the sign wording is different in the VSP 2011 Operations Manual and VSP 2011 Construction Guidelines, use the wording from the VSP 2011 Operations Manual section 13.7.8.2.