



April 1, 2015

SUPERIOR FLOAT TANKS LLC
JAMES RAMSEY
431 WEST 25TH STREET
NORFOLK VA 23517

Re: Description: SENSORY DEPRIVATION TANK
Manufacturer: SUPERIOR FLOAT TANKS LLC
Product Name: EVOLUTION FLOAT POD
Model Number(s): SFT-CWI-001.3
Product File No: 20150036

The specifications and/or plans for this product have been reviewed and determined to be in compliance with chapter SPS 390, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

- The Department hereby issues an alternate product approval to ch. SPS 390 based on the Wisconsin Statutes and the Wisconsin Administrative Code. This alternate approval is being granted based on establishing equivalency to s. SPS 390.10 (6), s. SPS 390.14 (5) and s. SPS 390.40 Wis. Adm. Code. This approval is valid until the end of April 2020.

This alternate approval is contingent upon compliance with the following stipulation(s):

- Each sensory deprivation tank shall display a label containing the following minimum information:
 1. Manufacturer's name and address;
 2. Model and serial number;
 3. Maximum number of bathers;
 4. Maximum recommended operating water temperature; and
 5. Dry weight, water capacity, filled and occupied weight
- A complete set of installation, operation and maintenance instructions shall be provided to and retained by the sensory deprivation tank owner. This includes the associated water treatment system, in addition to the tank proper.
- Installation and use of the Evolution sensory deprivation tank model SFT-CWI-001.3 shall be in strict accordance with Superior Float Tanks LLC published instructions.
- The electric service to each sensory deprivation tank shall be via a UL approved GFCI receptacle.
- The proprietary skimmers used within the Evolution sensory deprivation tanks shall be comprised of the following:
 1. cover with riser plate; and
 2. VGB compliant suction outlet

There's a 1/8-inch annular space between the riser plate and the VGB suction cover.

The suction outlets shall be installed in accordance with the Virginia Graeme Baker Act and ANSI/APSP-7 "American National Standard for Suction Entrapment Avoidance on Swimming Pools, Spas, Hot Tubs and Catch Basins." The VGB suction outlets have been tested in accordance to ANSI/APSP-16 2011 per section 1404 of the Virginia Graeme Baker Pool and Safety Act (VGB-2008).

Each tank shall have two suction outlets installed, separated by ≥ 36 inches on pipe center.

Due to the presence of the VGB compliant suction outlets, the use of the prefabricated lock-out system is optional. However, the lock-out system shall not replace the VGB compliant suction outlets but may be used in addition to the VGB compliant suction outlets.

- Each sensory deprivation tank shall have an intercom system installed within each tank.
- Three means of disinfection are used in a synergistic manner within this sensory deprivation tank. The tanks use hydrogen peroxide, ozone and UV. The resulting process is referred to as an "Advanced Oxidation Process" (AOP). The process consists of feeding hydrogen peroxide (H_2O_2) and/or ozone (O_3) ahead of a UV treatment unit. Upon exposure to the UV radiation, H_2O_2 and/or O_3 disassociate and hydroxyl radicals (OH^\cdot) are created.

The high total dissolved solids concentration (TDS due to $MgSO_4 \cdot 7H_2O$) may attenuate the desired UV radiation and adversely affect the disinfection process.

- The ozone (O_3) residual concentration in the treated water shall not exceed 0.1 mg/l.
- This approval allows for the manual addition of hydrogen peroxide (H_2O_2) to sensory deprivation tanks following the Wisconsin Department of Health Services (DHS) policy on manual chemical addition.
- A site specific plan review is required prior to the installation of this tank in accordance with s. SPS 390.04 (1) and s. SPS 390.04 (3) Wis. Adm. Code.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Glen W. Schlueter
Environmental Engineer - Plumbing Product Reviewer
Department of Safety and Professional Services
Division of Industry Services
Bureau of Technical Services
(608) 267-1401 Phone
(608) 267-9723 Fax
glen.schlueter@wi.gov E-mail