Float Tank Facility Operations Guide

Recreational Water Safety

DLCntyHealthWaterRec@clark.wa.gov

CLARK COUNTY WASHINGTON
PUBLIC HEALTH
ENVIRONMENTAL HEALTH

The following pages are a resource for float tank facility owners and operators to ensure compliance with the Washington State Department of Health Guidelines for Regulating Floatation Systems as Special Use Pools. The full guidance, as well as other useful resources, can be found at our float tank information webpage at www.clark.wa.gov/public-health/floatation-tank-facilities.

Operating permit

Any person operating a float tank facility (tank or cabin) must have a current permit issued by Clark County Public Health, or CCPH, to Washington Administrative Code 246-260-101. The permit is valid for one year and is subject to annual renewal. Permits are nontransferable. Refer to the environmental health fee schedule located at https://www.clark.wa.gov/sites/default/files/dept/files/public-health/EPH_Misc/EPH_FEE_SCHEDULE.pdf.

Surveillance

Owners and operators of float tank facilities shall allow a representative of CCPH to perform inspections as necessary to ensure compliance with standards pursuant to WAC 246-260-181.

Remodels, design and construction

Prior to a remodel of an existing float tank facility, CCPH must be notified of the proposed changes, per WAC 260-260-021. Certain changes may require a plan review, including changes to the physical facility, restrooms, barrier design and/or the float tanks or cabins. All new construction projects are required to go through a complete plan review.

Barriers

A barrier protection plan must be provided to prevent unauthorized access to float tank room(s). Facility barrier protection plans will be evaluated by CCPH during plan review and routine inspections.

Pumps

Pumps must be adequately sized to achieve four volumetric turnovers before each bather and at the end of the business day. Recirculation systems must not be turned on while the bather is in the tank or cabin to minimize a suction entrapment hazard. The mechanism to turn the recirculation systems on and off must be inaccessible to the public, and must be carefully operated by a trained staff member, according to the pump operation plan, to prevent injury. Note that float water treatment method devices must be electrically interlocked with the pump so that whenever the pump is turned off, the devices are also turned off.

Equipment room and chemical storage rooms

Space must be provided to allow routine maintenance of all equipment. The equipment and equipment/chemical storage rooms must be inaccessible to the public when unattended by the operator. Flooring in these rooms must be non-slip and chemical resistant.

Filters

Filters must be adequately sized to achieve four volumetric turnovers before each bather and at the end of the business day. The design must properly remove all unwanted debris from the water. Maintain the filter as directed by the manufacturer to ensure proper filtration.

Flow meter

A flow meter with a proper range for the design flow rate must be installed according to the manufacturer's specification for each floatation system. This is required to accurately measure the flow rate of the recirculation system.

Float water treatment plan

All float tank facilities must have a float water treatment plan that explains how float water remains clean and safe for the bathers. This plan must include the following information: all devices used to treat the float water; how treatment devices are maintained; routine maintenance and calibration of treatment method and testing devices; the duration of recirculation and the number of volumetric turnovers between bathers; the design flow rate; routine cleaning between bathers; method and frequency of complete drainage of each tank and reservoir; cleaning procedures and refilling with approved potable water and Epsom salt. Additionally, any chemicals or physical means used to control pH, to oxidize the float water or any other purpose not directly related to the treatment method must be included. Float tank water must be drained to an approved wastewater treatment facility

Float water treatment devices

All float tank facilities must treat the float water to prevent the growth of pathogens. Approved devices include UV lamps, ozonators, advanced oxidation or any combination of the approved devices. A statement of efficacy from the manufacturer that the device will function as intended in the proposed floatation system environment is required as part of approval.

Note that the use of an ozonator requires a calibrated ozone detector (hand-held types are acceptable) capable of providing an accurate reading of atmospheric concentrations of ozone in the range of 0.0 to 0.1 ppm within 6 inches above the float water, where the bather's face usually is. When an ozonator using the corona discharge method is present, a calibrated hardwired ozone detector with an audible alarm is required. This detector must be installed according to the manufacturer's recommendation to detect any ozone gas leak.

Important Note: There is currently no disinfectant chemical (including chlorine and bromine products) registered for use in floatation systems by the United States Environmental Protection Agency, or EPA. Off-label use of such disinfectant chemicals would be a violation of the Federal Insecticide, Fungicide and Rodenticide Act. Therefore, application of any chemical disinfectants in a floatation system is not allowed in Washington State until such chemicals are properly registered with the EPA and Washington State Department of Agriculture.

LOGGING REQUIREMENTS

AT THE END OF EVERY RECIRCULATION CYCLE	ONCE DAILY	AS OCCURS
Atmospheric ozone concentration in ppm within 6 inches above the float water (if an ozonator is in use).	Specific gravity results	Any maintenance performed (including draining and refilling)
	Solution temperature	Ozone leak incidents detected by an ozone meter
	Flow rate of the recirculation system while the pump is running	

Ventilation
The float tank rooms must maintain air quality according to the local building code. Adequate air removal must be provided to create a negative pressure to prevent excess moisture buildup in the float tank room.

Float pods or cabins must be maintained to have proper air quality using passive or mechanical ventilation methods to prevent the buildup of potentially harmful airborne chemicals.

Float tank rooms
Float room flooring design and materials should be impervious, non-slip and chemical resistant. The surfaces shall be easily cleanable.

Restroom, locker rooms and plumbing fixtures
Restroom facilities and plumbing fixtures are to be provided according to the local building code and must include at least one toilet, hand sink and hand wash supplies in each facility or within 50 feet of the facility entrance. Each float tank room is required to have a shower with hot water and soap. Hot water is not to exceed 120° Fahrenheit. A hose bib shall be provided in the facility for the addition of potable water to the tanks and for cleaning purposes.

Lighting
Overhead lighting must be capable of producing 20 foot candles or more in each float tank room, equipment room and chemical storage room.

Bacteriological sampling
Bacteriological sampling of float water in each tank or cabin is required monthly for the first six months of operation and every six months thereafter. Testing is to be done at a laboratory approved by CCPH to ensure that the bacteriological standards are met. Before the sample is taken, the float tank or cabin should have been used at least 10 float sessions to represent the usual condition of the float water. **Report all results to DLCntyHealthWaterRec@clark.wa.gov within 48 hours.**

Bacteriological standards
The floatation system must be immediately closed to the public after obtaining test results exceeding the bacteriological standards outlined below.

- Heterotrophic plate counts may not exceed 200 bacteria per milliliter.
- Total coliform may not exceed an average of one coliform per sample of 100 milliliters when using the membrane filter test.
- Total coliform may not exceed 2.2 bacteria per sample of 100 milliliters of water when using the most probable number (MPN) method.

The facility owner shall contact CCPH to discuss options for mitigation prior to re-opening.

Monitoring, recording, record keeping, reporting
Operators must perform routine tests to ensure safe water chemistry. The tests results must be recorded at the frequency outlined below. The records must be kept on file for three years and must be available upon request.

In addition to the above requirements, operators must report to CCPH any death, injury or illness that occurs at the float tank facility.

Operation plan
Float tank facility operators must maintain and keep the equipment clean and in good repair, as well as ensure the general safety of the bathers. It is the responsibility of facility owners and operators to follow a written operation plan to meet this requirement. This operation plan must include a pump operation plan and a contamination response plan. The operation plan will be reviewed and approved during plan review. If any items in the plan will be changed, notify CCPH before implementation.

When to close a float tank/cabin

It is the responsibility of the permit holder to ensure the safety of the float tank, cabins and overall facility. Reasons to close an individual float room include:

- If the atmospheric ozone concentration exceeds 0.05 ppm.
- Bacteriological test results exceed the maximum standard.
- If a shower is not operable or a restroom is not provided.

Emergency response plan

All float tank facilities must have a written emergency response plan in order to effectively respond to emergencies such as injury, sudden illness, fire, UV lamp breakage, toxic gas leakage (e.g. atmospheric ozone concentration exceeding 0.05ppm) and natural disasters. A telephone and a fully stocked standard 16-unit first aid kit with emergency blanket should be available on site at all times.

User advisory statement

It is the responsibility of facility owners and operators to ensure bathers are notified of the terms of use. A user advisory must be provided to all bathers in writing that includes the minimum requirements outlined below. Additional requirements may be included per your facility operation plan and code of conduct.

- Currently, there is no chemical disinfectant for floatation systems that is registered with the United States Environmental Protection Agency.
- Float water is treated for health and safety as approved by CCPH.
- It is not certain whether the treatment method is or is not effective.
- Float water quality is monitored by periodic bacteriological testing.

User agreement statement

Bathers are required to agree to rules of use and sign consent before first-time use at the facility. The owner shall provide in writing the minimum following rules to bathers. Additional rules may be included per your facility operation plan and code of conduct.

- Prohibiting use by anyone with a communicable disease (including communicable skin or respiratory disease) or anyone who has been ill with vomiting or diarrhea within the last two weeks.
- Requiring everyone to have a cleansing shower before and after the floating session.
- Advising patrons that anyone with seizure, heart or circulatory problems should consult their physician before use.
- Prohibiting use while under the influence of alcohol or drugs.

Required personnel

A floatation system facility must have an operator on site during all hours of operation that is adequately trained to operate the facility and manage other staff according to the operation plans.

CLARK COUNTY, WASHINGTON

Public Health
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For other formats, contact the Clark County ADA Office
Voice: 564.397.2322 / Relay: 711 or 800.833.6388
Fax: 564.397.6165 / Email: ADA@clark.wa.gov