# Chapter 246-262 WAC RECREATIONAL WATER CONTACT FACILITIES

**Last Update:** 12/15/17

WAC	
246-262-001 246-262-010 246-262-020	Purpose and authority. Definitions, abbreviations, and acronyms. General administration.
246-262-030 246-262-040	Construction permit. Operating permit.
246-262-050	Water quality standards, analysis, and sample collection.
246-262-060 246-262-070	General design, construction, and equipment. Specific design, construction, and equipment.
246-262-080 246-262-090	Operation. Monitoring, reporting, and recordkeeping.
246-262-100 246-262-110	Inspection. Advisory committee.
246-262-120 246-262-130	Enforcement. Notice of decision—Adjudicative proceeding.
246-262-140 246-262-150	Insurance. Compliance.
246-262-160 246-262-170	Variance. Innovations—Substitutions.
246-262-990	Fees.

WAC 246-262-001 Purpose and authority. The purpose of these rules is to protect the health, safety, and welfare of users of recreational water contact facilities (RWCFs). The rules as set forth are adopted per RCW 70.90.120.

[Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-001, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-010, filed 6/22/88.

- WAC 246-262-010 Definitions, abbreviations, and acronyms. The definitions in this section apply throughout this chapter unless the context clearly indicates otherwise.
- (1) "Advanced first aid" means a course of instruction recognized by the American Red Cross, department of labor and industries, the U.S. Bureau of Mines, or fire services training program.
  - (2) "ANSI" means American National Standard Institute.
- (3) "Approved" means the department or local health officer has stated in writing that the design plans and specifications are in accordance with chapter 246-262 WAC.
  - (4) "ARC" means American Red Cross.
- (5) "Architect" means a registered architect currently licensed under chapter 18.08 RCW in Washington state.
  - (6) "APSP" means Association of Pool and Spa Professionals.
  - (7) "ASTM" means American Society for Testing Material.
- (8) "Attendant" means a person trained to operate an attraction and control the users in a safe orderly manner.
- (9) "Attraction or ride" means any of the specific types of recreational facilities involving partial or total immersion or intentional contact with the water designated for public recreational use.
- (10) "Biomechanics" means the study of the human body as a system operating under the laws of Newtonian mechanics and the biological laws of life.
  - (11) "Board" means the state board of health.
- (12) "Boogie or mini-surf board" means any semirigid device used in a wave pool for flotation or as a riding device.

- (13) "Branch line" means suction piping between a junction fitting and a suction outlet.
- (14) "Centerline" means the path defined by geometric midpoints of a component or structure, generally used in consideration of the slide path in flume rides.
  - (15) "CNCA" means Council for National Cooperation in Aquatics.
- (16) "Communication system" means any combination of devices permitting the passage of or exchange of messages between park operating personnel and between operating personnel and users. Systems can include, but are not limited to, two-way radios, hardwired intercoms, horns, whistles, hand signals, direct voice, signs, or equivalent.
- (17) "Contaminant" means any physical, chemical or biological substance present in the RWCF water which may adversely affect the health or safety of the user and/or the quality of the water.
- (18) "Cross-connection" means any physical arrangement connecting:
- (a) A potable water system directly or indirectly, with anything other than another potable water system; or
- (b) A RWCF to any potable or nonpotable water source capable of contaminating either the RWCF or potable water source as a result of backflow.
- (19) "Department" means the Washington state department of health.
- (20) "Discharge section" means the component or components making up the exit of the water slide, water tube, inner tube ride, speed slide, ramp slide, drop slide or drop tube, or kiddie flume. These components are the elements controlling the final direction and speed of the user.
- (21) "Diving envelope" means the minimum dimensions of an area within the pool necessary to provide entry from a diving board, platform, or attraction segment where users enter above pool water level.
- (22) "Drop slide or drop tube ride" means a sloped trough, chute, or tube exiting the user above the pool operating water level.
- (23) "Engineer" means a registered professional engineer currently licensed under chapter 18.43 RCW in Washington state.
- (24) "Entry access points" means the areas where users enter an attraction.
- (25) "Entry rate" means the frequency at which users are permitted access to the attraction.
- (26) "Equalizer line outlet" means a suction outlet located on the pool wall below the waterline and connected by pipe to the body of a skimmer to prevent air from being drawn into the pump if the water level drops below the skimmer weir.
- (27) "Ergonomics" means a multidisciplinary activity dealing with the interactions between humans and their environment plus the traditional environmental elements atmosphere, heat, light, and sound, as well as objects with which the user comes in contact.
  - (28) "FINA" means Federation Internationale de Natation Amateur.
- (29) "Flume or tube entry" means the area at which users enter a water slide, water tube, inner tube ride, speed slide, drop slide, drop tube, or kiddie flume.
  - (30) "fps" means feet per second.
  - (31) "gpm" means gallons per minute.
- (32) "IAAPA" means International Association of Amusement Parks and Attractions.
- (33) "Injury or illness report" means the written record of all facts regarding an injury or illness associated with the RWCF.

- (34) "Inner tube ride" means an attraction where users ride inner tube-like devices through a series of chutes, channels, flumes, and pools.
- (35) "Innovative recreational water contact facility" means any type of RWCF currently unregulated.
- (36) "Intermediate pool" means any pool between the entry and exit pools in attraction using a series of pools.
- (37) "Junction fitting" means a pipe fitting in the shape of a "T" or a "Y" used to connect suction outlets to a pump or a balancing tank, and provides two branch line connections and one trunk line connection.
- (38) "Kiddie flume or tube attraction" means a flume, chute, or tube designated for and restricted to use by small children.
- (39) "Lifeguard" means an individual currently certified by red cross in advance lifesaving or lifeguard training, or YMCA senior lifesaver, or equivalent certification through the royal Canadian lifeguard services.
- (40) "Lifeguard station" means the designated work station of the lifeguard.
- (41) "Local health officer" means the health office of the city, county, or city-county department or district or a representative authorized by the local health officer.
- (42) "Main drain" means a submerged suction outlet for transferring water from a recreational water contact facility.
  - (43) "mg/l" means milligrams per liter.
- (44) "Multiactivity pool" means a pool with more than one type of attraction (i.e., an adult activity pool with a series of tubes, chutes, cable rides, etc., intended for use by individuals with specific swimming abilities).
  - (45) "NSF" means National Sanitation Foundation.
  - (46) "NSPI" means National Spa and Pool Institute.
- (47) "Operating levels" means water levels maintained within attractions during use for proper operation of facility and for controlling safety and sanitation.
- (48) "Operations" means all aspects of a RWCF, which must be controlled to make the facility safe, healthy, and usable for the purpose intended.
- (49) "Owner" means a person owning and responsible for a RWCF or authorized agent.
- (50) "Person" means an individual, firm, partnership, co-partnership, corporation, company, association, club, government entity, or organization of any kind.
- (51) "Ponding" means a condition where water fails to drain from walking surfaces.
  - (52) "ppm" means parts per million.
- (53) "Primary zone of visual coverage" means the area assigned to a lifeguard or attendant for primary visual surveillance of user activity.
- (54) "Radius of curvature" means the radius arc which denotes the curved surface from the point of departure from the vertical sidewall (springline) of the pool to the pool bottom.
- (55) "Ramp slide" means a slide allowing one or more users to slide in unison down a straight incline to a runout or a receiving pool.
- (56) "Recirculation filter water" means water which is recirculated by the RWCF for treatment purposes, i.e., filtration and disinfection.

- (57) "Response time" means elapsed time between bather distress and initiation of rescue assistance by a lifeguard (or attendant where applicable).
- (58) "RWCF" means recreational water contact facility which is an artificial water associated facility with design and operational features that provide patron recreational activity which is different from that associated with a conventional swimming pool and purposefully involves immersion of the body partially or totally in the water and includes, but is not limited to, water slides, wave pools, and water lagoons.
  - (59) "Secretary" means the secretary of the department.
- (60) "Serious injury" means any injury requiring admission to a hospital.
- (61) "Speed slide or speed tube" means a sloped trough, flume, tube, or roller track having long straight and/or steep drops where users sustain speeds of twenty miles per hour or more.
- (62) "Springline" means the point from which the pool wall breaks from vertical and begins its arc in the radius of curvature (for coved construction) to the bottom of the pool.
- (63) "Suction fitting standard" means the ANSI/APSP-16 2011, Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs.
- (64) "Suction outlet" means a fitting; fitting assembly and related components, including the sump or bulkhead fitting, cover, and hardware that provides a localized low pressure area for the transfer of water from a recreational water contact facility. Types of suction outlets include main drains and equalizer line outlets.
- (65) "Surfboard" means a rigid device used in a wave pool for riding.
- (66) "Tail coverage" means providing insurance coverage for a given period of time for discovery of claims made after the policy term for "claims made" type of insurance.
- (67) "Total turnover" means the time it takes for the pool attraction water volume to be recirculated as a sum of the flows from treatment turnover and attraction recirculation systems turnover.
- (68) "Treatment turnover" means the minimum time necessary to circulate the entire attraction water volume through the recirculation filter system.
- (69) "Trunk line" means suction piping between a junction fitting and a pump or a balancing tank.
- (70) "T.U." means turbidity unit as measured by the nephelometric method.
- (71) "Wading activity pool" means a pool or area less than twenty-four inches in total water depth with activities intended for younger children.
- (72) "Walking surface" means any direct access surface to the attractions or change rooms where the user will be in bare feet. Areas set aside for picnicking, sunbathing, and lounging are excluded.
- (73) "Water slide or water tube" means a sloped trough-like flume or tube structure of varying slope and direction using water as a lubricant and/or method of regulating the rider speed.
- (74) "Water treatment operator" means the person appointed to operate the mechanical equipment and perform related water quality monitoring for proper operation of the physical facility.
- (75) "Wave pool" means a recreational pool producing waves which usually begin at the deep end and proceed toward and dissipate at the shallow end.

(76) "WWA" means World Waterpark Association.

[Statutory Authority: RCW 70.90.120. WSR 12-17-102, § 246-262-010, filed 8/17/12, effective 9/17/12; WSR 10-20-131, § 246-262-010, filed 10/5/10, effective 11/5/10; WSR 92-02-020 (Order 226B), § 246-262-010, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-020, filed 6/22/88.]

- WAC 246-262-020 General administration. (1) The department and the local health officer for each local health jurisdiction containing a RWCF shall develop a joint plan of operation listing the roles of each agency for administering these rules. The plan shall designate who will be responsible for:
  - (a) Plan review;
  - (b) Permit issuance;
  - (c) Inspection;
  - (d) Surveillance; and
  - (e) Enforcement.
- (2) The department shall have information on which agency to contact for obtaining construction and operation permits.
  - (3) Fees may be charged as authorized in RCW 70.90.150.

[Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-020, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-030, filed 6/22/88.]

- WAC 246-262-030 Construction permit. (1) Persons planning to construct, alter, or modify a RWCF, excluding routine maintenance, shall provide the following to the department or local health officer for review and approval:
  - (a) A completed construction permit application:
- (b) Three sets of plans and specifications prepared and signed by an engineer or architect; and
- (c) A report prepared by an engineer certifying the design of the RWCF is consistent with accepted safety engineering practices and industrial standards. Such engineer shall have experience in safety design, including ergonomic aspects of biomechanics of RWCFs, amusement rides, or equal.
- (2) Owners may schedule a predesign meeting with the designer and the department or local health officer to determine if the project is consistent with the intent of these rules;
- (3) Following review of the completed permit application and plans and specifications, the department or local health officer shall:
- (a) Forward written approval, including construction permit, or denial to the owner;
  - (b) Forward a copy of approved plans to the designer; and
- (c) Forward a copy of the approval letter to the department or local health officer and local building department.
- (4) The owner shall ensure any construction, modification, or alteration is completed according to approved plans and specifications;

- (5) Upon completion of RWCF construction, alteration, or modification and prior to use, owners shall:
- (a) Submit to the department or local health officer a construction report signed by an engineer or architect certifying that construction is substantially in compliance with approved plans and specification; and
- (b) Notify the department or local health officer at least five working days prior to intended use of the facility.
- (6) Owners of the RWCF must comply with all other applicable agency codes and standards. These include, but are not limited to:
- (a) The National Electrical Code, chapter 19.28 RCW and chapter 296-46 WAC as determined by the electrical section of the Washington state department of labor and industries.
- (b) Local gas piping and appliance codes, American Gas Association standards, and certification meeting the latest ANSI Z21.56 or other applicable and equivalent standards;
- (c) Local building authority standards, including structural design of components;
  - (d) State and local plumbing authority standards;
- (e) Washington state department of labor and industries requirements for pressure vessels under chapter 70.79 RCW and chapter 296-104 WAC; and
- (f) Codes designated under chapter 70.92 RCW for accommodating persons with disabilities.

[Statutory Authority: RCW 70.90.120 and 44.04.280. WSR 18-01-081, § 246-262-030, filed 12/15/17, effective 1/15/18. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-040, filed 6/22/88.]

- WAC 246-262-040 Operating permit. (1) No person shall operate a RWCF without a current operating permit issued by the department or local health officer.
- (2) To obtain an operating permit, owners of an RWCF must provide information to the department or local health officer that shows the RWCF is in compliance with these rules.
  - (3) Operating permits shall be:
  - (a) Valid for one year;
  - (b) Renewed annually; and
- (c) Nontransferable without written consent of the department or local health officer. For purposes of this section, a change in management of a corporation, partnership, association, or other nonindividual business entity shall create a new person requiring either consent to a permit transfer or issuance of a new permit upon proper application.
- (4) The department or local health officer issuing the operating permit may revoke or suspend the permit if the RWCF is not operated in accordance with chapter 70.90 RCW or chapter 246-262 WAC.

[Statutory Authority: RCW 70.90.120. WSR 92-02-020 (Order 226B), § 246-262-040, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-040, filed 12/27/90, effective 1/31/91. Statutory Authority:

RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-050, filed 6/22/88.]

- WAC 246-262-050 Water quality standards, analysis, and sample collection. (1) Owners shall maintain waters free from harmful levels of disease-producing organisms, toxic chemicals, or adverse physical conditions.
- (2) Owners shall maintain RWCF waters to meet standards of bacteriological quality. Standards include:
- (a) Heterotrophic plate counts not to exceed a density of two hundred bacteria per milliliter in any series of tests; and
- (b) Total coliform density not to exceed an average of one coliform bacteria per one hundred milliliters in any series of tests.
- (3) Owners shall maintain continuous and effective methods of disinfection of RWCF waters at all times with use of:
- (a) Chlorine or bromine as described in Table 1 of this section; and/or
- (b) Alternate forms of disinfection which meet the following criteria:
- (i) Registered with the environmental protection agency, if necessary;
- (ii) Registered with the Washington state department of agriculture, if necessary;
- (iii) Conformance with NSF standard 50 or equal when applicable; and
  - (iv) Adherence to guidelines established by the department.
  - (4) Owners shall maintain:
- (a) Physical and chemical conditions within the ranges specified in Table 2 of this section; and
  - (b) Cleanliness by:
- (i) Closing an affected area of the RWCF or affected portion when contaminated with feces, vomit, sewage, or other hazardous or unknown material until the area is clean, disinfected, and free of the hazardous material;
- (ii) Daily removal of scum or floating material on the pool water surface; and
- (iii) Continuous removal of scum or floating material by action of overflow of pool water with flotsom screened and filtered.
- (5) Persons collecting water samples for laboratory analysis shall:
- (a) Collect and transport samples for chemicals and micro-organisms based on the most recently published edition of standard methods for the examination of water and waste/water analysis published jointly by the American Public Health Association/Water Pollution Control Federation and American Waterworks Association; hereafter, it is referred to as "standard methods;"
- (b) Have laboratory tests performed per "standard methods" at laboratories approved by the department to provide such analyses;
  - (c) Provide adequate data for completing analyses; and
- (d) Use water sample bottles approved by the department for collection of samples.
- (6) Persons shall use field test kits with a suitable range of accuracy for the parameters routinely measured as noted in Table 3 of this section.
- (7) Owners shall require and ensure addition of chemicals or materials to RWCF water only when the use has been approved or recog-

nized as acceptable by the department. Current lists of approved or acceptable materials are available from the department.

(8) Owners shall perform additional tests as directed by the department or local health officer.

TABLE 1 MINIMUM AND MAXIMUM LEVELS OF DISINFECTANTS							
Currently Recognized Disinfectants		2-7.49; 7	esidual	; 7.8-8.0 Levels of	Maximum Residual Level in mg/1*		
1. Chlorine	Free available chlorine	1.0	1.4	1.8	8		
2. Chlorinated cyanurate	Free available chlorine	1.5	2.0	2.8	8		
3. Bromine	Total available bromine	2.0	2.5	3.5	8		

#### Note:

Maximum residual or manufacturer's recommendation (whichever is less).

# TABLE 2 ACCEPTABLE RANGES OF SELECTED PHYSICAL AND CHEMICAL WATER QUALITY CONSTITUENTS

Che	mical or Physical Constituent	Minimum	Maximum
1.	pH	7.2	8.0
2.	Water Clarity (safety)	main drain visible at all times	_
3.	Turbidity (shielding microorganisms from disinfection)	_	0.5* T.U.
4.	Cyanuric acid or its derivatives (if used)	0	90 mg/1
5.	Temperature		104°F.

### Note:

\* In peak use periods, turbity may increase to 1.0 T.U. provided it returns to 0.5 T.U. within a six-hour period after peak use. Turbidity is not a required routine analysis which must be performed by the RWCF. Turbidity monitoring may be required by the department or local health officer if special conditions warrant it.

### TABLE 3 RANGE OF ACCEPTABLE TESTING LEVELS\*

Chemical Test	Minimum Range	Minimum Accuracy
1. Free available chlorine	0.3  to  3.0  mg/1	0.2 mg/1
2. Total chlorine	0.3  to  3.0  mg/1	0.2  mg/1
3. Total bromine	0.3  to  3.0  mg/1	0.2 mg/1
4. pH	7.0 to 8.2	0.2
<ol><li>Cyanuric acid</li></ol>	0 to 100 mg/1	5 mg/1
6. Alkalinity	0 to 300 mg/1	15 mg/1

### Note:

\* Do not make determinations of chemical conditions based on readings at the extreme measurable limits of the scale.

[Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-050, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-060, filed 6/22/88.

WAC 246-262-060 General design, construction, and equipment.

- (1) Owners shall locate RWCFs to:
- (a) Minimize pollution by dust, smoke, soot, and other undesirable substances;
  - (b) Eliminate pollution from surrounding surface drainage; and
- (c) Ensure pools within the RWCF are more than fifteen feet from any structure, object, or land formation (i.e., pumphouse, tree, etc.), which would provide a user with the opportunity to jump from such a structure into the pool. This does not include any barriers provided to prevent unauthorized access to pool or segments of attractions which enter pool.
- (2) Owners shall use only materials in the structure and equipment which are nontoxic, durable, inert, impervious to water, and easily cleaned.
  - (3) Owners shall design and maintain walking surfaces which are:
  - (a) Sloped a minimum one-fourth inch per foot;
  - (b) Of a nonslip finish;
  - (c) Equipped with sufficient drains to prevent standing water;
  - (d) Free of resilient coverings, e.g., carpeting; and
  - (e) At least four feet in width.
- (4) Owners shall provide adequate barrier protection to prevent unauthorized access including:
- (a) In outdoor facilities, a barrier six feet or more in height with:
- (i) Openings, holes, or gaps not to exceed four inches except openings protected by gates or doors; and
- (ii) Lockable gates and entrances either regulated during periods of use or provided with a self-closing, self-latching mechanism a minimum of forty-two inches from the ground.
- (b) In indoor facilities, suitable barriers to prevent access by unauthorized individuals or pool access by unattended small children.
  - (5) Owners shall ensure that pools:
- (a) Comply with all provisions of chapter 246-260 WAC where pool facilities are a separate attraction;
  - (b) Have surfaces with:
  - (i) Materials complying with subsection (2) of this section;
  - (ii) Watertight and nonabrasive construction;
  - (iii) Nonslip finish where users are walking; and
- (iv) White or light color finish not obscuring the view of objects or surfaces.
- (c) Are dimensionally designed to provide for the safety of the user and circulation of the water including, but not limited to:
- (i) Absence of protrusions, extensions, means of entanglement, or other obstruction which can cause entrapment or injury;
- (ii) Construction tolerances conforming with current ANSI public pool standards;
  - (iii) Uniform pool floor slopes as follows:
- (A) Not exceeding one foot of drop in seven feet of run for pools serving as landing or exiting pools, where total water depth is less than forty-eight inches; and
- (B) Providing a maximum slope of one foot of drop in twelve feet of run up to a depth of five and one-half feet in pools where users enter and participate in extended activities.
- (iv) Vertical walls for a minimum distance noted in Table 4 of this section, which may be curved (not to exceed allowable radius) to join the floor.

- (A) Vertical means walls not greater than eleven degrees from plumb.
- (B) Coving or portion of the side wall of a diving area in the pool shall conform as described in subsection (5)(c)(vi) of this section.
- (C) In new construction or alterations to existing construction, ledges are prohibited.
- (D) Requirements in subsection (5)(c) of this section do not apply to spas.
- (v) A maximum intrusion beyond the vertical (as defined in subsection (5)(c)(iv)(A) of this section) with any configuration not to exceed a transitional radius from wall to floor where floor slopes join walls and which:
- (A) Has its center of radius no less than the minimum vertical depth specified in Table 4 of this section below the water level;
  - (B) Has arc of radius tangent to the wall; and
- (C) Has a maximum radius of coving (or any intrusion into the pool wall/floor interface) determined by subtracting the vertical wall depth from the total pool depth.

### TABLE 4 MAXIMUM RADIUS COVING OR POOL INTRUSION DIMENSIONS BETWEEN POOL FLOOR AND WALL\*

Pool Depth 2'0" 2'6" 3'0" 3'6" 4'0" 4'6" 5'0" >5'0"

Minimum Slide Wall

Vertical Depth 1'6" 1'10" 2'2" 2'6" 2'10" 3'2" 3'6" >3'6"

Maximum Radius

of Curvature 6" 8" 10" 12" 1'2" 1'4" 1'6" \*\*Maxi-

mum radius equals pool depth minus the vertical wall depth

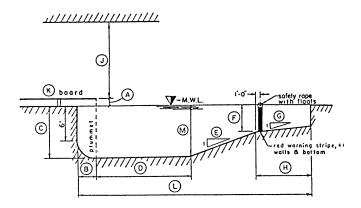
Note:

- \* For pool depths which fall between the depths listed, values can be interpolated.
- \*\* Radius of coving cannot intrude into pool within diving envelope or deep water entry area for attractions entering above pool water level.
- (vi) Provision of diving envelopes in pools or areas of pools designated for diving activities to include:
- (A) A diving envelope of no less than the CNCA standard configuration\* noted in Figure 1 of this section in areas where user would enter from deck level, diving board, or platform at a height of less than one-half meter (twenty inches).

Note: \* This requirement is based on a standard described in CNCA publication "Swimming Pools: a Guide to their Planning, Design, and Operation" 1987. Fourth edition. Human Kinetics Publisher, Inc., Champaign, Illinois. Figure 8.1

FIGURE 1:

Minimum dimensions for pools with provision for diving from deck level or providing boards or platforms at a height less than one-half meter.



Dimension	Minimum	Preferred or Maximum
A Height of board above water		20 in.
B Board overhang	2 ft 6in.	3 ft
C Depth of water at plummet	9 ft	10 ft*
D Distance from plummet to start of upslope	16 ft	18 ft*
E Inclination of upslope of bottom		1:3
F Depth of water at breakpoint	4 ft 6 in.	
G Slope of bottom in shallow portion of pool	1:12	1:15*
H Length of shallow section of pool	8 ft	14 ft*
I Distance to any overhead structure	13 ft	15 ft*
K Board length		12 ft
L Length of pool	40 ft	50 ft*
M Dimension not less than C minus	6 in.	

Note:

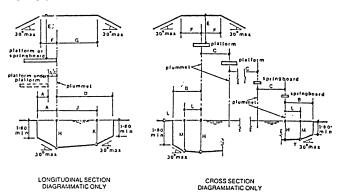
(B) A diving envelope of no less than the FINA standard configuration\*\* noted in Figure 2 of this section in areas where user would enter from diving board or platform at a height of one-half meter (twenty inches) or greater.

Note:

\*\* This requirement is based on a standard described in FINA publication "FINA Handbook - 1986-1988." Constitution and rules governing swimming, diving, water polo, and synchronized swimming, 1986-1988. Edited by E. Allen Harvey, Vancouver, Canada VGN 3R6, Section D, pp. 114-115.

FIGURE 2:

Minimum dimensions for pools with boards or platforms at a height of one-half meter or more.



	Dimensions	SPRINGBOARD				PLATFORM		
FINA	are in Metres	1 Metre	3 Metres	1 Metres	3 Metres	5 Metres	7.5 Metres	10 Metres
DIMENSIONS FOR	LENGTH	4.80	4.80	4.50	5.00	6.00	6.00	6.00

<sup>\*</sup> Values with asterisks are not to be considered as maximums.

<sup>\*\*</sup> Warning stripe at break point may be of any contrasting color.

		Dimensions	SPRINGBOARD			PLATFORM										
F	INA	are in Metres	1 Me	etre	3 Me	tres	1 Me	etres	3 M	etres	5 Me	tres	7.5 M	etres	10 M	letres
D	DIVING FACILITIES	WIDTH	0.5	0	0.5	0	0.6	50	1.:	50	1.5	0	1.5	0	2.	00
Revise	d to 1st Jan 1987	HEIGHT	1.0	0	3.0	0	0.60-	1.00	2.60-	3.00	5.0	0	7.5	0	10	.00
			HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT
A	From plummet	DESIGNATION	A-1		A-3		A-1P1		A-3P1		A-5		A-7.5		A.10	
	BACK TO POOL WALL	MINIMUM	1.80		1.80		0.75		1.25		1.25		1.50		1.50	
A/A	From plummet	DESIGNATION									AA5/1		AA7.:	5/3/1	AA10	0/5/3/1
	BACK TO PLATFORM Plummet directly below	MINIMUM									1.50		1.50		1.50	
В	From plummet to	DESIGNATION	B-1		B-3		B-1p1		B-3p1		B-5		B-7.5		B-10	
	POOL WALL AT SIDE	MINIMUM	2.50		3.50		2.30		2.90		4.25		4.50		5.25	
С	From plummet to	DESIGNATION	C-1/1		C-3/3/1		C-1/1p1		C-3/1I	P1/3p1	C-5/3/1		C-7.5/	5/3/1	C-10/7	7.5/5/3.
	ADJACENT PLUMMET	MINIMUM	2.40		2.60		1.65		2.10		2.50		2.50		2.75	
D	From plummet to POOL WALL AHEAD	DESIGNATION	D-1		D-3		D-1p1		D-3p1		D-5		D-7.5		D-10	
		MINIMUM	9.00		10.25		8.00		9.50		10.25		11.00		13.50	
Е	On plummet, from BOARD TO CEILING	DESIGNATION		E-1		E-3		E-1p1		E-3p1		E-5		E-7.5		E-10
		MINIMUM		5.00		5.00		3.50		3.50		3.50		3.50		5.00
F	CLEAR OVERHEAD	DESIGNATION	F-1	E-1	F-3	E-3	F-1p1	E-1p1	F-3p1	E-3p1	F-5	E-5	F-7.5	E-7.5	F-10	E-10
	behind and each side of plummet	MINIMUM	2.50	5.00	2.50	5.00	2.75	3.50	2.75	3.50	2.75	3.50	2.75	3.50	2.75	5.00
G	CLEAR OVERHEAD	DESIGNATION	C-1	E-1	C-3	E-3	G-1p1	E-1p1	G-3p1	E-3p1	G-5	E-5	G-7.5	E-7.5	G-10	E-10
	ahead of plummet	MINIMUM	5.00	5.00	5.00	5.00	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50	6.00	5.00
Н	DEPTH OF WATER	DESIGNATION		H-1		H-3		H-1p1		H-3p1		H-5		H-7.5		H-10
	at plummet	MINIMUM		3.50		3.80		3.30		3.60		3.80		4.50		5.00
J	DISTANCE AND DEPTH	DESIGNATION	J-1	K-1	J-3	K-3	J-1p1	K-1p1	J-3p1	K-3p1	J-5	K-5	J-7.5	K-7.5	J-10	K-10
K	ahead of plummet	MINIMUM	5.00	3.40	6.00	3.70	5.00	3.20	6.00	3.50	6.00	3.70	8.00	4.40	11.00	4.75
L	DISTANCE AND DEPTH	DESIGNATION	L-1	M-1	L-3	M-3	L-1p1	M-1p1	L-3p1	M-3p1	L-5	M-5	L-7.5	M-7.5	L-10	M-10
M	each side of plummet	MINIMUM	1.50	3.40	2.00	3.70	1.40	3.20	1.80	3.50	4.25	3.70	4.50	4.40	5.25	4.75
N	MAXIMUM SLOPE TO REDUCE DIMENSIONS beyond full requirements	POOL DEPTH CEILING HT	30 deg 30 deg		wi	th wid		tailed. I	or wide		nmet) ap		Platform	n	•	

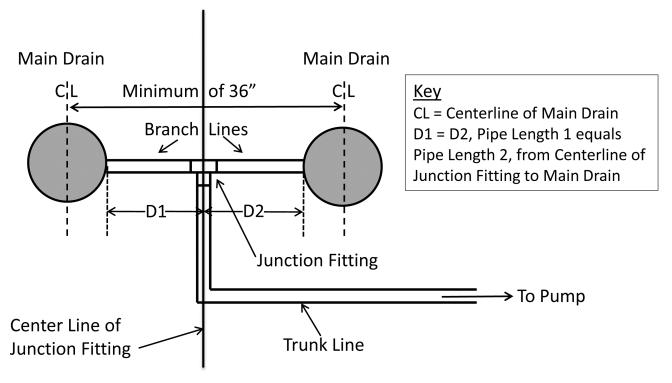
- (d) Have adequate handholds around the perimeter in pools designed for extended swimming and bathing activity and excluding wave pools; and
  - (e) Stairs, ladders, or stepholes with:
- (i) Stairs, when provided, meeting the following construction requirements:
  - (A) Treads of a nonslip finish;
- (B) Stair tread edges colored to contrast with the color of the pool and clearly visible to the users;
- (C) Recessed in pool areas used for lap swimming or provided with wave action; and
  - (D) Equipped with handrails extending over the edge of the deck.
  - (ii) Ladders or stepholes which:
- (A) Furnish exit from pools greater than four feet in depth except in landing pools bringing the user toward a shallow area after entering the water;
- (B) Are spaced a minimum of one for every fifty feet of pool perimeter greater than four feet deep;
- (C) Are provided at both sides of the deep end in pools over thirty feet in width; and
- (D) Are equipped with a handrail at the top of both sides extending over the coping or edge of the deck.
  - (iii) User access at the shallow end of pool.

- (6) Owners shall ensure treatment turnover at rates no less than designated as follows:
- (a) In receiving pools for water slides, water tubes, inner tube rides, speed slides or tubes, drop slides or tubes, and kiddie flume slides, treatment turnover time can be based on any of the following:
  - (i) Total attraction volume in one-hour period;
- (ii) Treatment turnover equals design peak usage (maximum users per hour) expressed in gpm;
- (iii) A rate of one hour for 20,000 gallons per two or less attraction segments. Treatment turnover times may increase proportionately for larger pool volumes per two or less attraction segments;
- (iv) Alternative methods where provisions to reduce contaminants are justified to the satisfaction of the department or local health officer; and
  - (v) Treatment turnover times not to exceed six hours.
- (b) For wave pools, a minimum treatment turnover time of two hours; and
- (c) For activity pools, a minimum treatment turnover time of four hours.
  - (7) Owners shall provide pool inlets which are:
- (a) Submerged and located to produce uniform circulation of water and chemicals throughout the pool; and
- (b) Located on the bottoms of pools greater than two thousand five hundred square feet, unless otherwise justified by the engineer to the satisfaction of the department or local health officer.
- (8) Except as provided in (d) and (e) of this subsection owners shall provide pool outlets with:
- (a) Overflow and main drain systems with each designed to carry one hundred percent of total recirculation filter flow;
  - (b) Overflow outlets that have:
- (i) Design to maintain a minimum of sixty percent of filter recirculation flow at all times;
- (ii) An overflow channel on the pool perimeter to promote uniform circulation and skimming action of the upper water layer for pools greater than twenty-five hundred square feet, with:
- (A) Design preventing matter entering channel from returning to the pool;
- (B) Dimensions minimizing the hazard for bathers, such as catching arms or feet in an overflow channel;
  - (C) 0.01 foot slope per foot or more;
- (D) Drains sufficiently spaced and sized to collect and remove overflow water to return line to filter where applicable;
- (E) Size sufficient to carry one hundred percent of the recirculation flow plus the surge flow equivalent to one-fifth of the balancing tank expressed in gallons per minute.
- (iii) Skimmers, when used on pools up to twenty-five hundred square feet, if:
  - (A) Demonstrated to operate properly under design conditions;
  - (B) Turbulence is not expected to interfere with operation;
- (C) Maximum flow rate through skimmers does not exceed four gpm per inch of weir;
- (D) Devices are recessed in the wall of the pool so that no part protrudes beyond the plane of the wall into the pool;
- (E) The skimmer is equipped with a device to prevent air lock in the recirculation suction line (i.e., an equalizer line). If equalizer lines are used they must be protected with suction outlets that conform to the suction fitting standard; and

- (F) The skimmer is equipped with a removable and cleanable screen designed to trap large solids.
- (iv) Sidewall channels, when used on pools up to twenty-five hundred square feet, which accept the total recirculation volume of the pool through the upper side of the pool if:
- (A) Overall flow through the channel exceeds four times the treatment recirculation rate;
  - (B) Design of channel prevents entrapment of the user;
  - (C) Openings of any screens have less than one-half inch slots;
- (D) Channel openings do not allow access beyond the pool, except with the use of specific tools requiring their opening;
- (E) Open area of screens prevent a suction or entrapment hazard which could be dangerous to the user; and
- (F) The channel provides an action pulling water from the top of the pool to remove floatable debris and oils.
  - (c) Main drains in all pools must:
  - (i) Be located at the low points of the pool;
- (ii) Have piping that is manifolded with junction fittings placed in the middle of branch line piping between main drains, so that the length of branch line piping is equal on each side of the junction fitting; see Figure 3

FIGURE 3:

Main Drain Branch Line Piping Detail.



- (iii) Have a minimum of two main drains spaced at least three feet apart, measured between the centers of the drain covers;
  - (iv) Conform to the suction fitting standard;
  - (v) Have covers with a maximum flow of 1.5 feet per second;
- (vi) Be designed so that if one main drain becomes blocked, the remaining main drains are rated to at least one hundred percent of the maximum pump flow; see Table 5

(vii) Have means to control flow from recirculation pump or balancing tank.

TABLE 5
MAIN DRAIN FLOW RATING REQUIREMENTS

	Number of Main Drains Per Recirculation System				
	2	3	4	5	
Main drain rated flow capacity must be at least equal to the percent of maximum pump flow indicated, depending on the number of main drains.	100%	50%	33.3%	25%	

- (d) Existing recreational water contact facilities may be modified to operate without main drains, provided that water quality and water clarity standards established in WAC 246-262-050 are met;
- (e) New recreational water contact facilities may be constructed without main drains, provided that water quality and water clarity standards established in WAC 246-262-050 are met.
  - (9) Owners shall maintain recirculation flow which:
- (a) Does not exceed six feet per second in suction or valved discharge side of pump; and
- (b) Does not exceed ten feet per second in open discharge pipes on the pressure side of the pump or filter discharge. This limit does not apply to the return inlet and the last two feet of pipe leading to the inlet.
- (10) Owners shall provide a surge chamber or surge area in RWCFs with an entry pool to:
  - (a) Accommodate at least two minutes of the total turnover; and
- (b) Maintain proper water levels for treatment and operation of the attraction.
- (11) Owners having RWCFs with overflow channels requiring balancing tanks shall:
- (a) Maintain volume equivalent to fifteen times maximum bathing load expressed in gallons; and
- (b) Increase capacity as necessary to provide volume for make-up water and to prevent air lock in the pump suction line.
- (12) Owners shall have and maintain recirculation pumps with adequate capacity to:
- (a) Provide design flows and pressure for recirculation of the RWCF water over the entire operating pressure of the filter;
- (b) Allow proper capacity for backwashing of filters when specified; and
- (c) Have self-priming capability when installed above the pool water level.
- (13) Where pumps precede the filter, owners shall install hair and lint strainers, which shall:
  - (a) Be located upstream of recirculation pumps;
- (b) Be of corrosion-resistant material sufficiently strong to prevent collapse when clogged;
  - (c) Have an operable cover; and
- (d) Provide valving to isolate the strainer when located below pool water level.

- (14) Owners shall provide valves at appropriate locations to allow isolation and maintenance of equipment.
  - (15) Owners shall provide equipment rooms which:
- (a) Enclose pumps, disinfection equipment, filters, and other electrical and mechanical equipment and associated chemicals;
- (b) Provide adequate working space and access to perform routine operations;
  - (c) Provide lighting and ventilation of the equipment room; and
  - (d) Are not accessible to the public.
- (16) Owners shall ensure the source of make-up water and associated piping in the RWCF:
- (a) Provides sufficient quantity to replace daily losses from the pool;
  - (b) Comes from a supply conforming with chapter 246-290 WAC; and
- (c) Prevents cross-connections using a minimum air gap of two pipe diameters or approved backflow prevention devices between the make-up water source and the RWCF attraction water or waste water.
  - (17) Owners shall equip RWCFs with filtration equipment which:
  - (a) Meets the applicable standards of NSF or equivalent;
- (b) Uses acceptable types and filter rates described in Table 6 of this section:

	FILTER TYPES AND ACCEPTABLE RATES					
		Range of Acceptable Filter Rate Expressed in gpm/sq. ft.				
	Type of Filter	Minim	ım	Maximum*		
Sano	i					
	Rapid & pressure	_		3		
	Pressure high rate	10	10			
	Vacuum high rate	10		18		
DE		Continuous feed	Manual feed			
	Vacuum	0.8	1.0	2.0		
	Pressure	1.0	1.35	2.0		
Cart	ridge**					
	Applied in					
	temperature					
	ranges:					
	<95°F.	_		0.375		
	>95°F.	_		0.188		

Note:

- \* Filters sized at maximum application rate shall use flow control valves.
- \*\* Cartridge filters shall have a nominal micron rating of twenty microns or less.
- (c) Has pressure or vacuum gauges for measuring loss of head (pressure) through the filter with minimum of one gauge preceding and one gauge following the filter;
  - (d) Has a flow indicator to measure treatment turnover; and
  - (e) Has means of discharging filter backwash to waste with:
  - (i) Discharge in a manner not creating a public nuisance;
- (ii) Disposal in accordance with applicable local law or regulation;
- (iii) Minimum air gap of two pipe diameters to prevent cross-connection from waste discharge and recirculation system piping;
- (iv) Discharge receptor and piping of sufficient size to accept backwash water and prevent flooding; and
  - (v) Provisions to monitor filter effluent during backwash.

- (18) Owners shall provide disinfection equipment which:
- (a) Provides a continuous and effective residual of disinfectant in the water;
  - (b) Uses a disinfectant with a residual that is easily monitored;
- (c) Conforms with NSF standards when liquid or solid feed materials are used;
- (d) Has a design feed rate which will provide effective disinfection levels when RWCFs are in use;
  - (e) Meets the following conditions if chlorine gas is used:
  - (i) Chlorine rooms shall:
  - (A) Be above ground level;
- (B) Be constructed so all openings or partitions with adjoining rooms are sealed;
- (C) Be located with consideration of prevailing winds to dissipate leaked chlorine away from the RWCF;
  - (D) Have door opening outward only and to the out-of-doors.
- (ii) Mechanical exhaust ventilation of the chlorine room including:
- (A) Air inlet located as far as possible from fan intake to promote good air circulation patterns;
- (B) Minimum of one air change per minute in the chlorine room when fan is operating;
- (C) A remote switch outside the room or a door-activated switch to turn on fan prior to entering;
  - (D) Suction for fan near the floor; and
- (E) Exhaust for fan and chlorinator vent located to prevent contaminating air intakes or prevent undue hazard for the users of the  $\mathsf{RWCF}$ .
  - (iii) Gas chlorine systems which:
- (A) Are vacuum injection type, with vacuum actuated cylinder regulators; and
- (B) Provide adequate-sized backflow and anti-siphon protection at the ejector.
- (iv) Breathing protection available in an accessible area for the operator outside of the chlorine room including:
- (A) Instructions about limitations with chlorine concentrations and concentrations of oxygen if chlorine-type canister masks are used; and
- (B) Self-contained breathing apparatus designed for use in a chlorine atmosphere as preferred equipment for working with chlorine leaks.
- (v) Means for automatic shutoff when the recirculation filter pump is off or flow to the pool is interrupted;
  - (vi) Chlorine gas cylinders shall:
  - (A) Be stored only in chlorine rooms; and
- (B) Not exceed one hundred fifty pounds tare weight per cylinder; except, wave pools, where one-ton cylinders may be used. Only a single, one-ton cylinder shall be stored on the premise at any time.
- (19) Owners applying chemicals other than disinfectant shall provide chemical feed equipment with:
- (a) Adequate size and design to allow routine cleaning and maintenance;
- (b) Materials resistant to action of the chemicals to be used; and
- (c) Means for automatic shut off when the recirculation filter pump is off or flow to the pool is interrupted.

- (20) Owners shall have testing equipment to provide means for measuring disinfectant residuals, pH, alkalinity, and any other chemicals used routinely in the RWCF water. In pools where compressed chlorine gas is used, means to detect leaks shall be provided, i.e., use of proper strength ammonia vapor.
- (21) Owners shall provide easily accessible change room facilities at all RWCFs with:
  - (a) Dressing rooms, showers, toilets, urinals, and sinks;
  - (b) Change room design including:
  - (i) Separate facilities for both sexes;
  - (ii) Floors of a nonslip finish with suitable drains;
- (iii) Junctions between walls and floors coved for ease of cleaning;
- (iv) Adequate ventilation to prevent build-up of moisture in the facility; and
  - (v) Provisions to minimize cross traffic with nonusers.
  - (c) Plumbing fixtures as described in Table 7 of this section.

TABLE 7 MINIMUM PLUMBING FIXTURE REQUIREMENTS BASED ON MAXIMUM PEAK PERIOD OCCUPANCY								
Number of Fixtures Required Per Occupancy Load								
<u>Ty</u>	pe of Fixture	Occupancy/Sex	Male	<u>Female</u>				
1.	Toilets	First 600	1/200	1/100				
		Portion						
		exceeding 600	1/450	1/300				
2.	Urinals	First 600	1/200	-				
		Portion						
		exceeding 600	1/450	-				
3.	Showers	First 300	1/100	1/100				
		Portion						
		exceeding 300	1/200	1/200				
4.	Sinks	First 400	1/200	1/200				
		Next 350	1/350	1/350				
		Portion						
		exceeding 750	1/500	1/500				
5.	Hose bibs		1 accessible to	change rooms				
6.	Janitor sink		1 within tl	ne RWCF				

- (d) Showers:
- (i) Delivering water at a temperature range between ninety and one hundred ten degrees Fahrenheit; and
  - (ii) Providing liquid or powdered soap in nonglass dispensers.
  - (e) Flush toilets and toilet tissue in dispensers;
  - (f) Sinks providing:
  - (i) Tempered or hot and cold running water,
  - (ii) Liquid or powdered soap in nonglass dispensers, and
  - (iii) Disposable towels or electric hand dryers.
- (g) Sewage disposed of in a manner approved by the department or local health officer; and
- (h) Hose bibs with vacuum breakers provided at convenient locations.
- (22) Owners shall design and maintain lighting at RWCF attractions or change rooms to:
- (a) Illuminate indoor attractions, outdoor attractions used after dusk, or change rooms with a minimum lighting intensity maintained thirty inches above any walking surface, pool deck, or pool area of:

- (i) Thirty foot-candles at indoor facilities;
- (ii) Fifteen foot-candles at outdoor facilities; or
- (iii) Twenty foot-candles in change rooms.
- (b) Allow lifeguards or attendants to clearly see every part of pool waters and walking surfaces; and
- (c) Meet any additional lighting requirements deemed necessary by the department or local health officer.
- (23) Owners shall provide first-aid facilities in every RWCF including:
  - (a) A twenty-four package first-aid kit per WAC 296-24-065;
  - (b) Two or more blankets reserved for emergency use;
- (c) A telephone with a prominently displayed list of emergency medical service response numbers;
  - (d) A backboard meeting the specifications of the ARC; and
- (e) Sufficient and suitable area to accommodate persons requiring treatment and necessary first-aid equipment.
- (24) Owners shall provide signs at RWCF entrances and change rooms. Any combination of words, pictures, or symbols may be used to convey the following conditions:
  - (a) Prohibition of use by persons with communicable diseases;
- (b) Prohibition of use by persons under the influence of alcohol or drugs;
- (c) Requirement for a cleansing shower before entering the attractions;
- (d) Warning that persons refusing to obey the attendants are subject to removal from the premises; and
- (e) Prohibition of food and drink in pool, change room, or on walking surfaces.
  - (25) If owners allow or make provision for food service:
- (a) Food and beverage sale and consumption areas shall be separate from pool, change room, and walking surfaces;
  - (b) Trash containers shall be provided; and
  - (c) No glass containers shall be allowed in the RWCF.
- (26) Owners shall prevent users or spectators access to mechanical, electrical, or chemical equipment facilities.
- (27) Owners shall provide an operable drinking fountain of the angle jet type design meeting the requirements of the American Standards Association.

[Statutory Authority: RCW 70.90.120. WSR 12-17-102, § 246-262-060, filed 8/17/12, effective 9/17/12; WSR 10-20-131, § 246-262-060, filed 10/5/10, effective 11/5/10; WSR 92-02-020 (Order 226B), § 246-262-060, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-070, filed 6/22/88.]

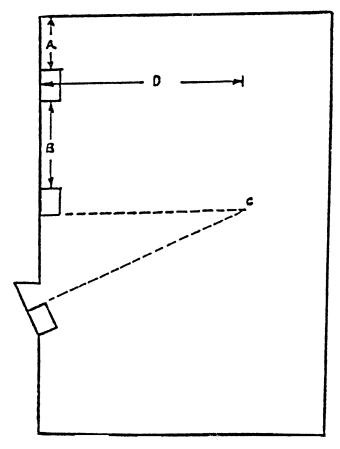
## WAC 246-262-070 Specific design, construction, and equipment. (1) Owners shall provide specific design, construction, and equipment.

- (1) Owners shall provide specific design, construction, and equipment for the various types of RWCF attractions.
- (2) Owners and manufacturers shall ensure adherence to recognized design and construction standards including, but not limited to:
  - (a) ASTM F-24 Standards on Amusement Rides and Devices;
- (b) "Suggested Health and Safety Guidelines for Recreational Water Slide Flumes" U.S. Department of Health and Human Services, Centers for Disease Control, Atlanta, Georgia, 30333;

- (c) "World Waterpark Association Considerations for Operating Safety" published by the World Waterpark Association, 7474 Village Drive, Prairie Village, Kansas, 66208; and
- (d) Department recognized or approved guidelines, criteria, or standards.
- (3) Owners shall ensure design and construction for water slides or tubes, inner-tube rides, kiddie flumes, or ramp slides meet the following minimum standards:
  - (a) Flume or tube entry access points shall have:
  - (i) Means to control unauthorized entrance;
- (ii) Handrails or slip-resistant surfaces provided to assist users; and
  - (iii) Attendant stations which provide:

  - (A) User entry spacing control;(B) Attendant line of sight to the attraction; and
  - (C) Attendant access to a communication system.
  - (b) Receiving pools shall have:
- (i) Clearances and minimum distances as noted in Figure 3 [4] of this section for tube or flume entrances into pools.

FIGURE 4 MINIMUM CLEARANCES FOR FLUME OR TUBE ENTRY TO RECEIVING POOLS						
MINI	MUM					
VALUE	DISTANCE	DESCRIPTION				
A	5 feet	Minimum distance from edge of flume to side of pool.				
В	6 feet	Minimum distance between sides of parallel flumes.				
C	20 feet	Minimum distance between two flumes or tubes that are not parallel shall be so constructed so that the intersecting lines of each closest side does not intersect for a distance of at least twenty feet from the end of each flume.				
D	20 feet	Minimum distance where flume terminates to opposite side of pool.				



- (ii) Flume or tube sliding surface ending below the pool operating water level when users ride unaided or on mats;
- (iii) Flume or tube perpendicular for a minimum of ten feet to the wall of entry;
  - (iv) Handrails, when steps are provided for exiting; and
  - (v) Attendant and/or lifeguard stations with:
  - (A) Unobstructed access to users; and
- (B) Ready access to communication system for contacting control station attendant and first-aid personnel.
- (4) Owners shall design and construct barriers to prevent unauthorized entry or exit from any intermediate pool.
- (5) Owners shall ensure design and construction of speed slides meet the following minimum standards:
- (a) Entry points conforming with subsection (3)(a) of this section;
- (b) Roller- or sled-type slides designed to prevent accidental flipping of the sleds or coasters when entering the water;
- (c) Provision of sufficient transition zones for deceleration preventing unsafe user impact; and
- (d) Maintenance of critical water operation levels providing proper braking action of the user.
- (6) Owners shall ensure design and construction of wave pools meet the following minimum standards:
- (a) Walls of wave pools shall be vertical with minimum six inch radius of curvature between wall and pool bottom;
  - (b) Pool bottom sloped:
- (i) Not exceeding one foot of drop in twelve feet of run where pool depths range from zero to three and one-half feet; or

- (ii) Not exceeding one foot of drop in nine feet of run where depths range from three and one-half feet to six and one-half feet.
- (c) Recessed ladders or step holes with vertical grab bars at depths above three and one-half feet:
  - (i) For emergency exit only;
- (ii) Spaced at intervals of fifty feet or less where pool water depths are greater than three and one-half feet. Pool water depths are measured without wave action.
  - (d) Deck width of at least ten feet along the shallow end;
- (e) A fence or restrictive barrier a minimum of forty-two inches in height and at least two feet out from the pool/deck interface at the side walls of wave pools, with emergency exit openings.
- (f) Lifeguard station locations appropriate to prevailing conditions;
- (g) A push-button system to shut off the wave-making equipment with:
- (i) Shut offs installed on sidewall decks and spaced at intervals no greater than one hundred feet, readily accessible to the lifeguards; and
  - (ii) Shock hazard protection.
- (h) A communication system for use by authorized personnel which is clearly audible to all portions of the pool;
- (i) A communication system for interaction between authorized personnel; and
- (j) Maximum bathing load (users) not to exceed a value equal to S/12+D/68 where:
- (i) "S" equals surface area in square feet where depth is less than three and one-half feet;
- (ii) "D" equals surface area in square feet where pool depth is three and one-half feet deep or greater; and
  - (iii) Pool depths are measured without wave action.
- (7) If inner tubes, boogie boards, or surf boards are used, the owner shall ensure the design and operation of the wave pool provides for such activity, including:
  - (a) The establishment of rules for use;
  - (b) Operating and emergency procedures; and
  - (c) Crowd control.
- (8) Owners shall ensure design and construction of any wading activity pool meets the following minimum standards. Wading activity pool areas are:
  - (a) Built with maximum water depth of two feet;
- (b) Constructed with pool walls so that distance from deck to water level is six inches or less for at least seventy-five percent of the pool perimeter;
- (c) Equipped with floors uniformly sloped to drain with a maximum slope of one foot of drop in twelve feet of run;
- (d) Separated by at least a four foot high barrier when distance to any water area greater than four feet in depth is less than ten feet; and
- (e) Protected from water areas greater than two feet by providing:
  - (i) A float line separating the two areas;
- (ii) A six inch contrasting color line on pool bottom and side walls at float line; and
- (iii) A transition zone with a maximum floor slope not exceeding one foot of drop in twelve feet of run.

- (9) Owners shall ensure design and construction of drop slides or drop tubes meet the following minimum standards:
  - (a) Entry in accordance with subsection (3)(a) of this section;
  - (b) Receiving pool envelope:
- (i) Conforming to CNCA standards noted in WAC 246-262-060 (5)(c)(vi)(A) if the point of exit is less than one-half meter (or twenty inches);
- (ii) Conforming to FINA standards noted in WAC 246-262-060 (5)(c)(vi)(B) if the point of exit is one-half meter (or twenty inches) or greater.
- (iii) Increasing in size to ensure user safety if warranted by angle of entry or speed of the user.
- (c) Sufficient distance between slides or tubes to prevent collisions of users. Parallel exits are recommended.
- (d) Direct line of sight and direct communication between entry access point and receiving pool.
- (10) Owners shall provide signs for specific RWCF attractions. Words, pictures, or symbols may be used to convey the following as appropriate:
- (a) Prohibition of running, standing, kneeling, tumbling, horseplay, or stopping in the flumes or tubes;
- (b) Failure to follow directions of attendant or failure to obey posted rules may result in removal from the RWCF;
  - (c) Prohibition of diving from flume;
  - (d) Prohibition of multiple user chains if applicable to ride;
  - (e) Requirement to leave the landing area promptly after exiting;
- (f) Recommended minimum or maximum age or height for using this attraction; and
  - (g) Prohibition of head first sliding if applicable to ride.
  - (h) Additional information on wave pools including:
  - (i) Warning that wave pools can be very tiring;
- (ii) Warning for small children and poor swimmers to use personal flotation devices in designated areas;
  - (iii) Requirement for adult supervision for children;
- (iv) Prohibition of diving, jumping, or entering from sides of pool; and
- (v) Prohibition of using surf boards during periods of general public use.
- (11) If the proposed attraction design is not addressed by or exceeds limitations of standards and guidelines specified by this section, owners shall submit:
- (a) Justification to the department or local health officer prepared by an engineer; and
- (b) Information on the construction, maintenance, and operation of the proposed attraction.

[Statutory Authority: RCW 70.90.120. WSR 10-20-131, § 246-262-070, filed 10/5/10, effective 11/5/10; WSR 92-02-020 (Order 226B), § 246-262-070, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-070, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-080, filed 6/22/88.]

- WAC 246-262-080 Operation. (1) Owners shall ensure proper operation to protect the public health and safety of the users and the water quality of the RWCF.
- (2) Owners shall prepare and use an operations manual for the  ${\tt RWCF}$ .
- (3) Owners shall routinely inspect, maintain, and repair the physical components to:
- (a) Ensure all structural facilities are intact and free from corrosion, wear, or stress;
  - (b) Prevent water ponding on walking surfaces;
  - (c) Ensure equipment is available and operable including:
  - (i) Disinfection, filtration, and related equipment;
  - (ii) Lifesaving equipment; and
  - (iii) Communication systems.
- (4) Owners shall ensure user health and safety by adequately staffing the RWCF during operation. Staffing shall include:
- (a) Advanced first-aid personnel at all times facility is open to the public;
- (b) Lifeguards and/or attendants as appropriate at all times facility is open to the public; and
  - (c) Water treatment operator as needed.
- (5) Owners shall ensure each type of personnel performs the following duties:
- (a) Advanced first-aid personnel shall provide emergency medical treatment;
- (b) Lifeguard shall have sole responsibility for guarding users in area assigned;
- (c) Attendants shall have sole responsibility for assuring proper user control in areas assigned; and
- (d) Water treatment operator shall oversee water treatment operations and conduct necessary water quality monitoring.
- (6) Owners shall ensure each type of personnel meets the designated training requirements:
  - (a) Advanced first-aid personnel with:
- (i) A current advanced first-aid certification or equivalent or higher levels of training including:
  - (A) First responder;
  - (B) Emergency medical technician; or
  - (C) Paramedic.
- (ii) Training on management of spinal injuries in the aquatic environment if lifeguards with lifeguard training are not at the RWCF.
- (b) Lifeguards with a current lifeguard certificate through any of the recognized programs in the definition (WAC 246-262-010(23));
- (c) Attendants with training determined appropriate by the owner to respond to user safety needs at the attractions, and:
- (i) Attendants stationed at shallow pool facilities (less than four feet water depth) with documented training regarding their response in at least the following:
- (A) Safety instruction on basic methods of water rescue, reaching, and extension assists;
  - (B) Cardiopulmonary resuscitation (CPR) and airway management;
  - (C) Basic bleeding control;
  - (D) Basic fracture management; and
- (E) Specific instruction on management of spinal injuries related to the aquatic environment.
- (ii) Attendants stationed at entry access areas with basic training including:

- (A) Controlling and supervising users in areas where attendant is responsible;
  - (B) Controlling timing of user entry rate where appropriate;
  - (C) Use of communication systems; and
  - (D) Knowledge of CPR by at least one attendant on duty.
- (d) Water treatment operators knowledgeable in pool water chemistry, filters, and pumping equipment; and
- (e) When gas chlorine is used, the manager or the operator with specific training in:
- (i) Proper operation and maintenance procedures of the chlorination equipment;
- (ii) Physical and chemical properties of chlorine gas under pressure;
  - (iii) Use of emergency safety equipment; and
- (iv) Proper first-aid procedures and response for accidental inhalation of chlorine gas and leaks.
  - (7) Owners shall ensure adequate emergency response with:
- (a) Lifeguards (and attendants where appropriate) located to provide a response time not to exceed thirty seconds to all users in pools;
- (b) Backup lifeguard (or attendant where appropriate) provisions so response time is maintained during multiple rescues;
- (c) Lifeguards at all pools. Attendants may substitute for lifeguards at pools less than four feet in depth which:
- (i) Are strictly used as receiving pools for attractions where users leave the pool immediately after entering; or
  - (ii) Are strictly used for wading activity; and
- (iii) Attendants meet the training requirements specified in subsection (6)(c)(i) of this section.
- (d) Provisions for emergency response drills to meet the response time and actions noted in WAC 246-262-080 including:
  - (i) Drills at least twice each operating season; and
  - (ii) Documentation of testing.
- (8) Owners shall regulate activities of users and spectators including:
- (a) Requirement to obey RWCF rules related to health and safety; and
- (b) Warning that failure to comply with rules constitutes grounds for exclusion from the premises or management action as necessary.
- (9) Owners shall ensure RWCF user control in specific attractions by requiring:
- (a) On speed slides, completion of the ride by one user before allowing another user to enter;
- (b) On ramp slides, clearing of the slide by one group prior to second group entering; and
- (c) On drop slide or tube, clearing of the pool entry area prior to allowing another user to enter.
- (10) Owners shall monitor various environmental conditions which affect facility safety. Weather conditions, including electrical storms, fog, wind, sun glare creating visibility problems, and other such factors shall be evaluated. Appropriate action shall be taken in response to these factors to ensure user safety.

[Statutory Authority: RCW 70.90.120. WSR 92-02-020 (Order 226B), § 246-262-080, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-080, filed 12/27/90, effective 1/31/91. Statutory Authority:

RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-090, filed 6/22/88.]

# WAC 246-262-090 Monitoring, reporting, and recordkeeping. (1) Owners shall:

- (a) Provide information requested by the department or local health officer for statewide injury and illness surveillance reports; and
- (b) Notify the department or local health officer within forty-eight hours of any drowning, near drowning, death, or serious injury or illness occurring at the RWCF.
- (2) Owners shall monitor and maintain records on the following for at least three years:
  - (a) Water quality conditions including:
- (i) Testing for residual disinfectant concentration three or more different periods daily, except once a day if electronic monitoring and control equipment is provided;
  - (ii) Hydrogen ion (pH) concentration tested daily;
  - (iii) Alkalinity monitored at least weekly;
- (iv) Any other chemical added to water including alum, algicides, cyanurate compounds, acid, and alkalinity compounds, etc.;
  - (v) Pressure or vacuum gauge readings; and
- (vi) Any gross contamination to the water (i.e., vomiting, feces, etc.).
- (b) Routine preventive maintenance provided on all hazardous equipment, e.g., gas chlorination equipment;
  - (c) Number of users of the facility; and
- (d) Credentials, training, and/or certifications required for personnel per WAC 246-262-080 of this chapter.
- (3) Owners shall notify the department in the event an incident occurs with a chemical creating a problem of health or safety significance (e.g., chlorine gas leak).
- (4) Owners shall make records available for department review upon request.

[Statutory Authority: RCW 70.90.120. WSR 92-02-020 (Order 226B), § 246-262-090, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-100, filed 6/22/88.1

- WAC 246-262-100 Inspection. (1) Owners shall permit the department or local health officer to perform on-site inspections as necessary in the discretion of the enforcing agency to ensure compliance with standards in chapter 70.90 RCW and chapter 246-262 WAC.
- (2) Employees of the enforcing agency shall provide appropriate identification when entering for purpose of routine inspections.

[Statutory Authority: RCW 70.90.120. WSR 92-02-020 (Order 226B), § 246-262-100, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-100, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-110, filed 6/22/88.]

- WAC 246-262-110 Advisory committee. The RWCF advisory committee shall:
- (1) Perform functions as specified in accordance with RCW 70.90.130;
  - (2) Meet at least one time each year;
- (3) Be composed of representatives as specified in RCW 70.90.130 appointed to staggered two-year terms, the representative from the department shall not be subject to these conditions;
  - (4) Select a chairperson every two years;
- (5) Establish department representative as ongoing secretary of the advisory committee; and
- (6) Present an annual report to the board summarizing committee activities.

[Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-120, filed 6/22/88.]

- WAC 246-262-120 Enforcement. (1) The department or, if enforcement responsibility has been assigned under a joint plan of operation, the local health officer:
  - (a) Shall enforce the rules of chapter 246-262 WAC; or
- (b) May refer cases within their jurisdiction to the local prosecutor's office or office of the attorney general, as appropriate.
- (2) When a RWCF is in violation of provisions of chapter 70.90 RCW or the rules of chapter 246-262 WAC, appropriate enforcement action may be initiated by the department, local health officer, local prosecutor's office, or office of the attorney general. Enforcement actions may include any one or a combination of the following:
- (a) Informal administrative conferences, convened at the request of the department, local health officer, or owner, to explore facts and resolve problems;
- (b) Orders directed to the owner and/or operator of the RWCF and/or the person causing or responsible for the violation of the rules of chapter 246-262 WAC;
- (c) Imposition of civil penalties of up to five hundred dollars per violation per day as authorized under RCW 70.90.200;
  - (d) Denial, suspension, or revocation of operating permits; and
- (e) Civil or criminal action initiated by the local prosecutor's office or by the office of the attorney general.
- (3) Orders authorized under this section include, but are not limited to, the following:
- (a) Orders requiring corrective measures necessary to effect compliance with chapter 246-262 WAC or chapter 70.90 RCW. Such orders may or may not include a compliance schedule; and
- (b) Orders to stop work and/or refrain from using any RWCF or portion thereof or improvement thereto until all permits, certifications, and approvals required by statute or rule are obtained.
  - (4) An order issued under this section shall:
  - (a) Be in writing;
- (b) Name the facility and the person or persons to whom the order is directed;
- (c) Briefly describe each action or inaction constituting a violation of chapter 70.90 RCW or the rules of chapter 246-262 WAC;

- (d) Specify any required corrective action or forbearance together with a schedule for completing such corrective action, if applicable;
- (e) Provide notice, as appropriate, that continued or repeated violation may subject the violator to:
  - (i) Civil penalties of up to five hundred dollars;
- (ii) Denial, suspension, or revocation of the facilities operating permit; or
- (iii) Referral to the office of the county prosecutor or attorney general.
- (f) Provide the name, business address, and phone number of an appropriate staff person who may be contacted in regard to an order.
  - (5) Service of an order shall be made:
  - (a) Personally, unless otherwise provided by law; or
  - (b) By certified mail return receipt requested.
- (6) Under such rules or policies as the department or local health officer may adopt, civil penalties of up to five hundred dollars per violation per day may be assessed against any person violating the provisions of chapter 70.90 RCW or chapter 246-262 WAC.
- (7) The department or local health officer shall have cause to deny the application or reapplication for an operating permit or to revoke or suspend a required operating permit of any person who has:
  - (a) Previously had:
  - (i) An operating permit suspended or revoked; or
- (ii) An application for an operating permit denied for any reason whether in this state or any other state.
- (b) Failed or refused to comply with the provisions of chapter 70.90 RCW, chapter 246-262 WAC, or any other statutory provision or rule regulating the construction or operation of a RWCF; or
- (c) Obtained or attempted to obtain an operating permit or any other required certificate or approval by fraudulent means or misrepresentation.
- (8) For the purposes of subsection (7) of this section, a person shall be defined to include:
  - (a) Applicant;
  - (b) Reapplicant;
  - (c) Permit holder; or
- (d) Any individual associated with subsection (8)(a), (b), or (c) of this section including, but not limited to:
  - (i) Board members,
  - (ii) Officers,
  - (iii) Managers,
  - (iv) Partners,
  - (v) Association members,
  - (vi) Employees,
  - (vii) Agents, and in addition
  - (viii) Third persons acting with the knowledge of such persons.
- (9) The department or local health officer may summarily suspend an operating permit, other required permit, license, or certification without a prior hearing if the department or local health officer:
- (a) Finds that public health, safety, or welfare imperatively requires emergency action; and
  - (b) Incorporates a finding to that effect in its notice or order.

[Statutory Authority: RCW 70.90.120. WSR 92-02-020 (Order 226B), § 246-262-120, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as §

246-262-120, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW and RCW 70.90.120. WSR 90-06-049 (Order 040), § 248-97-130, filed 3/2/90, effective 3/2/90. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-130, filed 6/22/88.]

- WAC 246-262-130 Notice of decision—Adjudicative proceeding. A person aggrieved by the department's or local health officer's denial, suspension, modification, or revocation of a license, issuance of an order, or levy of a civil penalty may request an administrative hearing.
- (1) A hearing requested to contest a local health officer's action is governed by the local health jurisdiction's rules for hearings.
- (2) A hearing requested to contest a department action is governed by chapters 246-10 WAC and 34.05 RCW.

[Statutory Authority: RCW 70.90.120. WSR 12-17-102, § 246-262-130, filed 8/17/12, effective 9/17/12; WSR 92-02-020 (Order 226B), § 246-262-130, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-130, filed 12/27/90, effective 1/31/91. Statutory Authority: Chapter 34.05 RCW and RCW 70.90.120. WSR 90-06-049 (Order 040), § 248-97-135, filed 3/2/90, effective 3/2/90.]

- WAC 246-262-140 Insurance. (1) As a condition of obtaining and maintaining a valid operating permit, owners shall provide evidence of having liability insurance.
- (2) The minimum amount of liability insurance required shall be one hundred thousand dollars combined single limit. The coverage for this insurance shall include:
- (a) Bodily injury or death of one or more persons in any one incident from the use of the RWCF.
- (b) Tail coverage shall be required twenty-four months beyond the insured period on a "claims made" form of insurance.
- (3) A certificate of insurance shall be provided to the department or local health officer at the time of application for operating permit subject to the approval of the risk manager of the state of Washington.
- (4) The liability insurance company shall provide the department or local health officer a thirty-day prior notice of cancellation, alteration, or nonrenewal. This condition shall be stated in the certificate.
- (5) If the owner's insurance is cancelled, the operating permit is void and the owner shall cease operation of the RWCF until required insurance is obtained and a valid operating permit is reinstated by the department or local health officer.

[Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-140, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-140, filed 6/22/88.1

WAC 246-262-150 Compliance. Existing RWCFs not complying with the design, construction, and equipment requirements outlined in WAC 246-202-060 and 246-262-070 of these regulations may continue in use, provided the facility is operated in continuous compliance of the safety, sanitation, and water quality provisions of chapter 246-292 WAC as outlined in WAC 246-262-050, 246-262-080, 246-262-090, and 246-262-140.

[Statutory Authority: RCW 70.90.120. WSR 92-02-020 (Order 226B), § 246-262-150, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-150, filed 6/22/88.]

WAC 246-262-160 Variance. The board may grant a variance from requirements of chapter 246-262 WAC if, in the sole discretion of the board, data and/or research provides sufficient evidence that the RWCF (attraction, device, equipment, procedure, etc.), will adequately protect public health and safety, as well as water quality.

[Statutory Authority: RCW 70.90.120. WSR 92-02-020 (Order 226B), § 246-262-160, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-160, filed 6/22/88.]

**WAC 246-262-170 Innovations—Substitutions.** The board authorizes the department:

- (1) To review new innovations, and if accepted for use, prepare appropriate amendments to chapter 246-262 WAC.
- (2) To allow substitution of equipment, facilities, or procedures required by chapter 246-262 WAC when, in the sole discretion of the department, data and/or research provide sufficient evidence that such substitution is equivalent to the requirement and will adequately provide for the protection of the public health and safety of persons using the RWCF.

[Statutory Authority: RCW 70.90.120. WSR 92-02-020 (Order 226B), § 246-262-170, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-170, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-170, filed 6/22/88.]

- WAC 246-262-990 Fees. (1) The fee for plan review of a new recreational water contact facility shall be four hundred dollars base fee plus an hourly rate of ninety-nine dollars for all hours of review beyond four hours plus the safety engineer reviewer's cost as billed.
- (a) The base fee must be provided to the department prior to initiating plan review.

- (b) Hourly fees for plan review will be charged regardless of whether the plans are approved or not.
- (c) The construction permit will not be issued until after full payment is received.
- (2) The fee for review of plans for alterations or modifications of an existing recreational water contact facility shall be the hourly rate of ninety-nine dollars.
- (3) The annual fee for an operating permit for a recreational water contact facility containing one attraction shall be one hundred eighty dollars.
- (4) The annual fee for an operating permit for a recreational water contact facility containing more than one attraction shall be one hundred eighty dollars for the first attraction plus fifty-one dollars for each additional attraction up to a maximum fee of three hundred thirty-five dollars.
- (5) The department may charge an additional fee of fifty-one dollars plus associated laboratory costs for inspections beyond those provided under the annual operating permit when necessary due to violations of such items as:
  - (a) Noncompliance with water quality standards; and
- (b) Failure to comply with operational requirements for health and safety.

[Statutory Authority: RCW 70.90.150. WSR 06-16-120, § 246-262-990, filed 8/1/06, effective 9/1/06. Statutory Authority: RCW 70.90.150 and 43.20B.250. WSR 03-14-146, § 246-262-990, filed 7/2/03, effective 8/2/03. Statutory Authority: RCW 43.70.040. WSR 91-02-050 (Order 122), § 246-262-990, filed 12/27/90, effective 1/31/91.]