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(FORM UPDATED: 08/11/2010)

WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2007-08

(session year)

Joint

(Assembly, Senate or Joint)

Committee for Review of Administrative Rules...

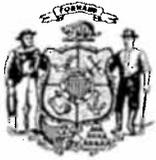
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* Contents organized for archiving by: Stefanie Rose (LRB) (August 2012)



State of Wisconsin \ Department of Commerce

RULES IN FINAL DRAFT FORM

Rule No.: Chapter Comm 90

Relating to: Design and Construction of Public Swimming Pools
and Water Attractions

Clearinghouse Rule No.: 08-056

The Department of Commerce proposes an order to repeal and recreate ch Comm 90 relating to the design and construction of public swimming pools and water attractions, and affecting small business.

Analysis of Proposed Rules

1. Statutes Interpreted.

Sections 101.02 and 145.26, Stats.

2. Statutory Authority.

Sections 101.02 and 145.26, Stats.

3. Related Statute or Rule.

- Chapter HFS 172, Safety, Maintenance and Operation of Public Pools and Water Attractions
- Chapters Comm 60 to 66, Wisconsin Commercial Building Code
- Chapters Comm 81 to 87, Wisconsin Uniform Plumbing Code

4. Explanation of Agency Authority.

Under the authority of ss. 101.02 and 145.26, Stats., the Department of Commerce has the authority to promulgate rules to protect the health, safety and welfare of the public by establishing reasonable and effective safety and health standards for the design, construction, alteration or reconstruction of public swimming pools, water attractions and associated equipment.

5. Summary of Proposed Rules.

The primary revisions to chapter Comm 90 reflect the most current edition of the American National Standards Institute/International Aquatics Foundation (ANSI/IAF) requirements for public swimming pools and aquatic recreation facilities. The proposed rules contain a number of modifications to the technical requirements within these standards, reorganization of current requirements and editorial changes. The public swimming pool portion of chapter Comm 90 has not been significantly revised since 1994 when the public swimming pool program was transferred to the Department of Commerce from the Department of Health Services. The proposed code requirements include updates that reflect current technology and options for the design and installation of public swimming pools and water attractions. The proposed revision of chapter Comm 90 also combines the public swimming pools and water attractions sections of the present code.

The following is a summary of the major rule changes to this chapter:

- a. Creates uniformity between the regulations for public swimming pools and water attractions.

- b. Provides more consistency between Wisconsin's code and the national standards (ANSI/IAF-1, 2 and 9).
- c. Provides clearer code language to eliminate the need for web interpretations on various issues (for example, vanishing edge pools).
- d. Delineates requirements for entries and exits serving public swimming pools and water attractions.
- e. Creates requirements and allowances for swimouts and underwater seats and benches.
- f. Expands the requirement for automatic chemical controllers to public swimming pools. Current code requires controllers for water attractions.
- g. Defines the enclosing building to be an acceptable barrier for indoor public swimming pools or water attractions.

6. Summary of, and Comparison with, Existing or Proposed Federal Regulations.

In December 2007, the United States Congress and President George Bush signed the Virginia Graeme Baker Pool and Spa Safety Act into law. This new federal law requires safety improvements in public pools and spas including the inspection and replacement of all drain covers with anti-entrapment devices or systems. Such devices or systems are expected to reduce injury due to the suction effects around drain outlets. The proposed revisions to Chapter Comm 90 are intended to comply with the public pool and water attractions requirements of the Pool and Spa Safety Act Section 1404.

An Internet search was conducted to review and compare any federal rules or proposed federal rules for "water attractions," "water parks," "water recreation facilities" and "public swimming pools." No federal rule or proposed rule was found that addresses public swimming pools, water parks, in-pool water attractions or play devices.

An Internet search to review and compare any federal rules or proposed federal rules for "pool slides" resulted in the finding of 16CFR, Part 1207, Consumer Product Safety Commission Standards for swimming pool slides (revised January 2008). It was found that 75 percent of pool slides are installed in residential pools and not within the scope of this proposal. No federal rule or proposed rule was found that addresses the manufacture, construction or installation of waterslides as they exist in today's water parks.

An Internet search to review and compare any federal rules or proposed federal rules for accessibility guidelines for persons with disabilities resulted in the finding of 36CFR, Part 1191, Architectural and Transportation Barriers Compliance Board's final rule on accessibility guidelines for recreational facilities for persons with disabilities (*Federal Register*, Vol. 67, No. 170, February 3, 2002). The guidelines ensure that newly constructed and altered recreation facilities including public swimming pools and spas meet the requirements of the Americans with Disabilities Act (ADA). In addition, the Architectural and Transportation Barriers Compliance Board provided significant input to the ANSI/IAF-1 Public Pool Standard Committee and worked to ensure consistency between the ANSI/IAF-1 standard and the ADA accessibility guidelines. The proposed changes to Chapter

Comm 90 references Vol. 67, No. 170, of the *Federal Register*, plus they are based on the ANSI/IAF-1 standard.

7. Comparison with Rules in Adjacent States.

A comparison of the four adjacent states found that all had regulations for public swimming pools and require pool plan approval before construction. This proposal also relates to water attractions (waterslides, splash pads, activity pools, etc.) and Wisconsin's neighboring states have various mechanisms for addressing new technology and imaginative designs.

The following information was ascertained during an Internet-based search of adjacent states:

- a. The Illinois Department of Public Health provides for the inspection and licensing of all public swimming pools, spas, waterslides, wading pools, and bathing beaches. Effective February 2003, the Department reviews all plans and specifications before construction can begin.
- b. The Iowa Department of Public Health, Division of Environmental Health oversees the design, construction and reconstruction of public swimming pools. It issues permits and certifies that the plans for swimming pools, spas, wading pools, waterslides, wave pools, and spray pads comply with rules and statutes that were revised May 2005.
- c. The Minnesota Department of Health provides plan review and construction inspection for all public pools within the state. The requirements include the design, construction, installation and alteration of a public pool including individual approval where the designer must prove a design's compliance with the intent of the code. The Department also is responsible for issuing permits.
- d. The Water Bureau, Drinking Water and Environmental Health Section of the Michigan Department of Environmental Quality is responsible for issuing construction permits for public swimming pools (including spas, leisure pools, activity pools, water slide pools, and lazy rivers). The Department also requires a permit for the modification of any existing public swimming pool.

8. Summary of Factual Data and Analytical Methodologies.

The primary methodology for updating the Wisconsin Administrative Code, chapter Comm 90 has been a review and assessment of the latest edition of the national technical standards for the design and construction of public swimming pools and water attractions. Staff prepared a comprehensive comparison of what is currently adopted under Comm 90 to the latest edition of the ANSI/IAF-1 Public Swimming Pools, ANSI/IAF-2 Spas and ANSI/IAF-9 Aquatic Recreation Facilities standards.

The Department's review and assessment process involved the participation of the Pool Advisory Code Council. The members of that Council represent many stakeholders involved in the pool and water attractions industry, including designers, manufacturers, inspectors, contractors and operators of public swimming pools. (A listing of the Pool Advisory Code Council is provided at the end of this analysis.)

The Department believes that the national model codes reflect current societal values with respect to protecting public health, safety and welfare in the design, construction, use, operation and maintenance of public swimming pools, water attractions and associated equipment. The ANSI/IAF uses a process open to all parties in the development of its standards. More information on the development of these standards may be obtained from the ANSI web site at: www.ansi.org.

9. Analysis and Supporting Documents Used to Determine Effect on Small Business or in Preparation of Economic Impact Report.

The Department used the Pool Advisory Code Council to gather and analyze information on potential impacts in complying with both the technical and administrative requirements of the codes. Many small businesses belong to the industry associations that sit on the advisory council. A responsibility of council members is to bring forth concerns that their respective organizations may have with the requirements including economic impact.

In addition to posting rule development and council activities on the Department's web site, the Department offers an Email subscription service that is available to small businesses. This service provides Email notification of council meetings, meeting, agendas and council meeting progress reports so small businesses can follow proposed code changes.

It is anticipated this requirement will not have a significant impact on small businesses owning, designing, building, altering, or remodeling public swimming pools, water attractions and associated equipment.

10. Effect on Small Business

The Department believes the rules will not increase the effect on small businesses from what the current rules impose on them. An economic impact report has not been required pursuant to s. 227.137, Stats.

11. Agency Contact

Lynita Docken, Program Manager, lynita.docken@wisconsin.gov, (608) 785-9349.

12. Public Hearing Comments.

A public hearing has been scheduled for July 8, 2008. The hearing record on this proposed rulemaking will remain open until July 18, 2008, to permit submittal of written comments from persons who are unable to attend the hearing or who wish to supplement testimony offered at the hearing. Written comments should be submitted to Lynita Docken, at the Department of Commerce, P.O. Box 2689, Madison, WI 53701-2689, or Email at lynita.docken@wisconsin.gov.

Council Members and Representation

The proposed rules have been developed with the assistance of the Pool Advisory Code Council. The members of that citizen advisory council are as follows:

- | | |
|------------------|--|
| Dave Baker | Pool Operators |
| Tom Carrico | Wisconsin Park and Recreation Association |
| Charles Neuman | World Water Park Association |
| Melanie Novinska | Wisconsin Innkeepers Association |
| Sean O'Connor | Pool Designer |
| David Pluymers | Wisconsin Department of Health and Family Services |
| William Rollins | Pool Designer |
| Jim Schwingle | Pool Designer |
| Peter Simon | Pool Engineer |
| Doug Voegeli | Wisconsin Environmental Health Association |
| Jack Waterman | Pool Owner |

SECTION 1. Comm 90 is repealed and recreated to read:

Chapter Comm 90

DESIGN AND CONSTRUCTION OF PUBLIC SWIMMING POOLS AND WATER ATTRACTIONS

Subchapter I – Administration

Comm 90.01 Authority and purpose. This chapter is promulgated under the authority of ss. 101.02 and 145.26, Stats., to regulate the design and construction, alteration or reconstruction of public swimming pools, water attractions and associated equipment in order to protect the health and safety of the public.

Comm 90.02 Application. (1) APPLICABILITY. This chapter applies to the design and construction of all public swimming pools, water attractions and associated slides, and to the reconstruction or alteration of all public swimming pools, water attractions and associated slides.

Note: Also refer to administrative rules administered by the department of health services, specifically ch. HFS 172, for additional requirements regarding public swimming pools, water attractions and associated slides.

Note: For accessibility information, refer to the final accessibility guidelines for recreational facilities, Federal Register, Vol. 67, No. 170, as published Tuesday September 3, 2002. Requirements relating to swimming pools, wading pools and spas are found under ADAAG 15.8.

(2) RETROACTIVITY. A rule of this chapter does not apply retroactively to public swimming pools, water attractions and associated slides existing prior to the effective date of the rule unless specifically stated in the rule.

(3) LOCAL ORDINANCES. A county, city, village or town or local board of health may enact ordinances for pools, water attractions and associated slides, provided the standards are not in conflict with this code.

(4) PETITION FOR VARIANCE. The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. Comm 3.

Note: Chapter Comm 3 requires the submittal of a petition for variance form (SBD-9890) and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Form SBD-9890 is available at no charge from the department at the Safety and Buildings Division website at www.wi.gov/sb.

Comm 90.03 Definitions. In this chapter:

(1) “Accessible” means easily and readily exposed for inspection and the replacement of materials or parts with the use of tools.

(2) “ANSI” means the American National Standards, Institute, Inc.

(3) “Approved” means acceptable to the department based on its determination of conformance with this chapter and good public health practices.

(4) "ASME" means the American Society of Mechanical Engineers.

(5) "Basin" means any vessel constructed of manmade materials and designed to hold water to be used as a public swimming pool or water attraction.

(6) "Bed and breakfast establishment" has the meaning found in s. 254.61 (1), Stats.

Note: Section 254.61 (1), Stats., reads: "Bed and breakfast establishment" means any place of lodging that: (a) Provides 8 or fewer rooms for rent to no more than a total of 20 tourists or transients; (b) Provides no meals other than breakfast and provides the breakfast only to renters of the place; (c) Is the owner's personal residence; (d) Is occupied by the owner at the time of rental; (e) Was originally built and occupied as a single-family residence or, prior to use as a place of lodging, was converted to use and occupied as a single-family residence; and (f) Has had completed, before May 11, 1990, any structural additions to the dimensions of the original structure, including by renovation, except that this limit does not apply to any of the following: 1. A structural addition, including a renovation, made to a structure after May 11, 1990, within the dimensions of the original structure. 2. A structural addition, made to a structure that was originally constructed at least 50 years before an initial or renewal application for a permit under s. 254.64 (1) (b) is made and for which no use other than as a bed and breakfast establishment is proposed. The structural addition under this subdivision shall comply with the rules under s. 101.63 (1) and (1m).

(7) "Breakpoint" means the line of separation between the shallow portion and the deep portion of a pool, defined by a sharp change in the slope of the pool bottom.

(8) "Children's slide" means a slide that has a maximum height of 4 feet as measured vertically from the slide entrance to the slide terminus and terminating in less than 24 inches of water.

(9) "Circulation system" means the outlets, inlets, equipment and piping of pools and water attractions designed to circulate water at a predetermined quantity and velocity in order to treat and purify the water, but does not include backwash piping.

(10) "Common wall" means a partition separating two pools, water attractions or whirlpools, or any combination of the aforementioned.

(11) "Contrasting color" means a variance from a color of 2 steps or more in value and less than 6.5 in value on the Munsell color-order system.

Note: Contrasting colors may cross hue and chroma lines.

(12) "Deck" means the unobstructed walking surface immediately adjacent to the pool or water attraction.

(13) "Deep portion" means that portion of a pool having a design water depth greater than 5 feet.

(14) "Department" means the department of commerce.

(15) "Drop slide" means a pool slide or water slide where the terminus is 20 inches or more above the water level.

(16) "Flume" means that part of a slide within which sliding takes place.

(17) "Interactive play attraction" means a water attraction, including but not limited to manufactured devices using sprayed, jetted or other water sources with a flow rate of more than 50,000 gallons per day

or a circulation system with water contacting the users and not incorporating standing or captured water as part of the user activity area.

Note: Splash pads and spray pads are examples of interactive play attractions.

(18) "NSF" means the National Sanitation Foundation.

(19) "Open swim" means a period of time when persons, other than those residing in living units associated with the pool or water attraction, are permitted to use the pool or water attraction.

(20) "Owner" or "operator" means a municipality, corporation, company, association, firm, partnership or individual owning, controlling or operating any public swimming pool.

(21) "Patron" means a user of the pool.

(22) "Play feature" means a physical object installed in a pool or water attraction that is intended for recreational use.

(23) "Pool" or "public swimming pool" has the meaning found in s. 145.26 (1), Stats. Public swimming pools include all of the following:

(a) "Cold soak pool" means a public swimming pool containing water colder than 72°F that is commonly used in conjunction with therapy or training.

(b) "Combination pool" means a public swimming pool used for swimming and diving.

(c) "Competition pool" means any pool intended for use by accredited competitive aquatic events.

Note: Accredited organizations may include U.S. Swimming, U.S. Diving, National Collegiate Athletic Association, National Federation of State High Schools Association, or Wisconsin Interscholastic Athletic Association.

(d) "Diving pool" means a public swimming pool used exclusively for diving.

(e) "Exercise pool" means a public swimming pool of shallow depth usually associated with a health spa and which may or may not have a current.

(f) "Limited purpose pool" means a public swimming pool used for a purpose not otherwise defined, such as for apparatus swimming, underwater photography training or another special use by the public.

(g) "Mobile pool" means a public swimming pool constructed on a mobile structure that is capable of being transported from place to place.

(h) "Therapy pool" means a public swimming pool used exclusively for medically administered therapy.

Note: Medically administered may be demonstrated by showing that a Department of Regulation and Licensing licensed therapist is responsible for the pool.

(i) "Wading pool" means a shallow public swimming pool having a maximum depth of 24 inches and intended for children's play.

Note: A zero-depth entry wading pool is an example of a wading pool.

(j) "Whirlpool" means a relatively small public swimming pool that uses high temperature water (greater than 93°F) and that may include a water agitation system. A whirlpool may also be referred to as a spa.

Note: Section 145.26 (1), Stats., reads: "public swimming pool means a fixed or mobile structure, basin, chamber or tank and appurtenant buildings and equipment that serve or are installed for use by the state, a political subdivision of the state, a motel, a hotel, a resort, a camp, a club, an association, a housing development, a school, a religious, charitable or youth organization, an educative or rehabilitative facility or another entity. Public swimming pool does not mean a fixed or mobile structure, basin, chamber or tank that only serves fewer than 3 individual residences."

(24) "Pool slide" means a slide where the drop from the slide terminus to water is less than 20 inches and the flume carries less than 100 gallons per minute of water.

(25) "Private guest room" means a room or rooms that provide sleeping accommodation offered for pay to tourists or transients.

(26) "Reconstructed or altered pool" means a pool construction project where replacement of or modification to the pool shell, circulation system and appurtenances occur. It does not include the replacement of equipment or piping previously approved by the department, provided that the type and size of equipment are not changed, nor does it include normal maintenance or repair.

Note: See listing in Appendix A-90.03 (24).

(27) "Run-out slide" means a waterslide where the rider does not enter into a plunge pool, but has a deceleration area that permits the rider to come to a stop before exiting the slide flume.

(28) "Shallow portion" means the portion of a pool having a design water depth of 5 feet or less.

(29) "Skimmer" means a device installed in a pool wall at the water level that is connected to the circulation piping and is intended to skim debris from the surface of a pool.

(30) "Slip-resistant" means a material that when wet has a coefficient of friction greater than 0.5.

(31) "Splash zone" means the area where water falls on the floor of an interactive play attraction.

(32) "Spray feature" means equipment that produces a flow of water on the patrons as part of a recreational experience.

Note: Spray features include geysers, water cannons and dumping buckets.

(33) "Swimming pool complex" means two or more pools that are located within the same enclosure or room.

(34) "Swimout" means an underwater seat area that has a floor that is higher than the floor of the pool and has walls that are recessed within the main pool wall.

(35) "Suction outlet" means a discharge port installed in the wall or floor of a pool that connects by way of piping to a pump.

(36) "Tourist rooming house" has the meaning found in s. 254.61 (6), Stats.

Note: Section 254.61 (6), Stats., reads: "Tourist rooming house" means any lodging place or tourist cabin or cottage where sleeping accommodations are offered for pay to tourists or transients. "Tourist rooming house" does not include: (a) A private boarding or rooming house, ordinarily conducted as such, not accommodating tourists or transients. (b) A hotel. (c) Bed and breakfast establishments.

(37) "Turnover rate" means the time for a given volume of water to pass through the circulation system. The volume of water is generally the basin volume and the time is usually expressed in hours.

(38) "Water attraction" means a public facility with design and operational features that provide patron recreational water activity other than conventional swimming and involves partial or total immersion of the body. Types of water attractions include:

(a) "Activity pool" means a water attraction with a depth of greater than 24 inches designed primarily for play activity that uses constructed features and devices including, but not limited to, pad walks, multiple flotation devices and similar attractions.

Note: The installation of a single basketball hoop, single flotation device or a single volleyball net does not transform a pool into a water attraction.

(b) "Leisure river" means a stream of near-constant depth in which the water is moved by pumps or other means of propulsion to provide a river-like flow that transports users over a defined path. A leisure river may include play features and devices. A leisure river may also be referred to as a tubing pool or a current channel.

(c) "Plunge pool" means a pool with a depth of greater than 24 inches, located at the exit end of a waterslide flume and intended and designed to receive slide users emerging from the flume.

(d) "Vanishing edge pool" means a water attraction where the top of one or more of the basin walls are submerged with no accompanying decks.

(e) "Vortex pool" means a circular pool that is equipped with a method of transporting water in the pool for the purpose of propelling users at speeds dictated by the velocity of the moving stream.

(f) "Wave pool" means a water attraction designed to simulate breaking or cyclical waves for the purposes of surfing or general play.

(g) "Zero-depth entry pool" means a water attraction having a sloped entrance to where the water depth is zero inches at the shallowest point.

(38) "Water attraction complex" means an enclosure or room where there are two or more water attractions or a water attraction and any number of public swimming pools.

(39) "Waterslide" means a slide where a water flow of 100 gallons per minute or more is intended to carry a rider down a flume.

Comm 90.04 Plan review and approval. (1) REVIEW. (a) *Review requirements.* All designs under the scope of this chapter shall be submitted to the department for review and receive approval from the department prior to the start of construction in accordance with this section.

Note: The department forms required in this chapter are available on request from the Department of Commerce, Safety and Buildings Division, P.O. Box 7162, Madison, WI 53707-7162; phone (608) 266-3151 and (608) 264-8777 (TTY); or may be downloaded from the Safety and Buildings web site at www.commerce.wi.gov/sb.

Note: For submittal of plumbing plans, see s. Comm 82.20.

(b) *Plans and specifications.* 1. At least 4 and no more than 5 complete sets of plans and one copy of specifications for the public swimming pool or water attraction design shall be submitted for review. These sets of plans and copies shall be clear, legible and permanently marked.

2. Plans submitted for review shall be accompanied by sufficient information for the department to determine if the installation and its performance will meet the requirements of this chapter.

Note: Sufficient information may include the diving board manufacturer's installation requirements and skimmer NSF/ANSI 50 ratings.

3. a. Plans and specifications, including adequate supporting design data, shall be prepared by a Wisconsin registered architect or professional engineer and bear that person's seal and signature.

b. Structural review of pool slides shall be based on conformance with the design requirements of slides and tower structures under ch. Comm 62.

4. The design for and extent of replaced or altered equipment and piping shall be included on the submittal of reconstructed or altered swimming pools or water attractions.

5. Pursuant to s. Comm 2.07 (3), the department shall review and make a determination on an application for plan review within 15 business days.

(c) *Revised submittals.* All changes or modifications, involving the provisions of this chapter, shall be approved in writing by the department prior to installation.

(d) *Revocation of approval.* The department may revoke any approval, issued under the provisions of this chapter, for any false statements or misrepresentation of facts on which the approval was based.

(e) *Expiration of approval.* Plans approved by the department shall expire 2 years after the date indicated on the approval letter, if construction has not commenced within that 2-year period.

(f) *Limitations.* A conditional approval of a plan by the department shall not be construed as an assumption by the department of any responsibility for the design. The department does not hold itself liable for any defects in construction or for any damages that may result from the specific installation.

(g) *Fees.* Fees for plan review submittals shall be as specified in ch. Comm 2.

(2) **DETAILS.** (a) *General.* 1. The name and address of the owner shall be included on the plans or in a separate report.

2. A map indicating the exact location of the facility with street address shall be included on the plans or in a separate report.

(b) *Site*. Site information shall be included on the plans indicating at least the location of all wells and utilities, topography and natural water features.

(c) *Plot plan*. 1. A general map and detailed scaled drawings shall be submitted showing the site plan or floor plan of pertinent portions of the public swimming pool or water attraction structure, public swimming pool or water attraction orientation, including the location of all slides, interactive play attractions and play features. The designed pool water elevation shall be shown on the detailed drawing.

2. All water supply facilities, sources of drinking water, public or private sewers and relative elevations of paved or other walkways and the equipment room floor shall be shown on the plans.

3. When public water and sewer systems are proposed to serve the public swimming pool or water attraction, the elevations of storm and sanitary sewer inverts and street grade shall be shown on the plans.

(d) *Construction plans*. Detailed scaled and dimensional drawings for each individual pool or water attraction shall include at least all of the following:

1. A layout plan showing dimensioned longitudinal and transverse cross sections of the public swimming pool or water attraction. Include location and type of inlets, overflows, pool drains, suction outlets, deck drains, drinking fountains or sources of drinking water, piping, entries and exits, hosebibbs, fences, telephones, design of deck, curb or walls enclosing the pool, paved walkways, overflow gutters or devices, ladders, stairs, diving boards, slides and play features.

2. A flow diagram showing the location, plan, elevation and isometrics of filters, pumps, chemical feeders, ventilation devices, heaters, surge tanks including operating levels, backflow preventers, valves, piping, flow meters, gauges, thermometers, test cocks, sight glasses and the drainage system for the disposal of pool and filter wastewater.

3. The plan drawings for all available sanitary facilities and any bathhouse facilities provided including dressing rooms, lockers and basket storage, showers and all other plumbing fixtures.

4. A single table with the specifications for the pool or water attraction and all associated equipment.

5. The design information used to determine the surface area and volume of the pool or water attraction.

(e) *Specifications*. Complete technical specifications for the construction of the pool or water attraction and all appurtenances to accompany the drawings under par. (d), shall include at least all of the following:

1. All construction details not shown on the plans.

2. Detailed requirements for the type, size, operating characteristics and rating of all mechanical and electrical equipment.

3. Number and location of plumbing fixtures and piping associated with the pool.

4. The sources of all water supplies.

5. Filter media such as diatomaceous earth, sand, gravel or other approved material.
6. Any information related to the project requested on the plan submittal application.
7. Any other information necessary to determine compliance with this chapter.

(3) ALTERNATE PUBLIC SWIMMING POOL OR WATER ATTRACTION DESIGN REVIEW.

(a) *Innovation.* The provisions of this chapter are not intended to prevent innovative designs for public swimming pools or water attractions. The department may issue an approval of an alternate design if the design complies with the intent of this chapter.

(b) *Alternate designs.* 1. For an alternate public swimming pool or water attraction design, an approval shall be required before statewide installation and use.

2. Alternate designs submitted for review shall be accompanied by sufficient information for the department to determine if the design and its performance will meet the requirements of this chapter.

3. The department shall review and make a determination on an application for an alternate design submittal within 90 days of receipt of all information and fees required for completion of the review.

4. The department may include specific conditions in issuing an approval for an alternate design, including an expiration date for the approval. Violations of the conditions under which an approval is issued shall constitute a violation of this chapter.

5. If, upon review, the department determines that an alternate design does not comply with the intent of this chapter, the request for approval shall be denied in writing.

6. If a design receives alternate approval, a plan for the site-specific public swimming pool or water attraction complying with the alternate design approval shall be submitted in accordance with sub. (1).

(c) *Revisions.* If an approved alternate design is modified or additional assertions of function or performance are made, the approval shall be considered null and void, unless the design is resubmitted to the department for review and approval is granted.

(d) *Revocation of approval.* The department may revoke an approval issued under this section for any false statements or misrepresentation of facts or data on which the approval was based, or as a result of design failure.

(e) *Limitations.* An approval issued by the department for an alternate design may not be construed as an assumption of any responsibility for defects in design, construction or performance of any installation or for any damages that may result.

(f) *Fees.* Fees for the review of an alternate design under this section and any onsite inspections shall be submitted in accordance with ch. Comm 2. Fees for any miscellaneous inspections shall be as specified in s. Comm 2.04 (2).

(4) EXPERIMENTAL PUBLIC SWIMMING POOL OR WATER ATTRACTION DESIGN REVIEW. (a) *Experimental Review.* The provisions of this chapter are not intended to prevent

innovative designs for public swimming pools or water attractions. The department may issue an approval of an experimental public swimming pool or water attraction design for the purpose of proving compliance with the intent of this chapter.

(b) *Experimental designs.* 1. Experimental public swimming pool or water attraction designs submitted for review shall be accompanied by sufficient information as requested by the department.

2. The department shall review and make a determination on an application for an experimental submittal within 120 days of receipt of all information and fees required for completion of the review.

3. The department may include specific conditions in issuing an approval for an experimental design, including an expiration date for the approval. Violations of the conditions under which an approval is issued shall constitute a violation of this chapter.

4. If, upon review, the department determines that an experimental design is not acceptable, the request for approval shall be denied in writing.

5. If a design receives experimental approval, a plan for the site-specific public swimming pool complying with the experimental design approval shall be submitted in accordance with sub. (1).

6. The department may limit the number of applications for review of experimental systems.

(c) *Revisions.* If an approved experimental design is modified or additional assertions of function or performance are made, the approval shall be considered null and void, unless the design is resubmitted to the department for review and approval is granted.

(d) *Revocation of approval.* The department may revoke an approval issued under this section for any false statements or misrepresentation of facts or data on which the approval was based, or as a result of design failure.

(e) *Limitations.* An approval issued by the department for an experimental design may not be construed as an assumption of any responsibility for defects in design, construction or performance of any installation or for any damages that may result.

(f) *Fees.* Fees for the review of an experimental design under this section and any onsite inspections shall be submitted in accordance with ch. Comm 2. Fees for any miscellaneous inspections shall be as specified in s. Comm 2.04 (2).

Note: Plans and specifications are to be submitted to the Department of Commerce, Safety & Buildings Division, via the United States Postal Service via P.O. Box 7162, Madison, Wisconsin 53707-7162 or other delivery services via 201 West Washington Avenue, Madison, Wisconsin, 53703.

90.05 Construction. (1) CONSTRUCTION SUPERVISION. (a) *Options.* 1. The installation, alteration or reconstruction of any public swimming pool or water attraction shall be under the supervision of a construction contractor pursuant to s.443.14 (6) stats., or a Wisconsin registered architect or engineer.

Note: Section 443.14 (6), Stats., reads: Notwithstanding any other provision of this chapter, contractors, subcontractors or construction material or equipment suppliers are not required to register under this chapter to perform or undertake those activities which historically and customarily have been performed by them in their respective trades and specialties, including, but not limited to, the preparation and use of drawings, specifications or layouts within a construction firm or in construction operations, superintending of

construction, installation and alteration of equipment, cost estimating, consultation with architects, professional engineers or owners concerning materials, equipment, methods and techniques, and investigations or consultation with respect to construction sites, provided all such activities are performed solely with respect to the performance of their work on buildings or with respect to supplies or materials furnished by them for buildings or structures or their appurtenances which are, or which are to be, erected, enlarged or materially altered in accordance with plans and specifications prepared by architects or professional engineers, or by persons exempt under subs. (1) to (5) while practicing within the scope of their exemption.

2. The supervising construction contractor, architect or engineer shall be responsible for the public swimming pool or water attraction being in conformance with this chapter and the plans and specifications approved by the department.

3. At the time of the arranging the first inspection, the owner or the owner's authorized agent shall designate to the department the name and address of the supervising construction contractor or the name and certification number of the supervising architect or engineer.

(b) *Operation and Maintenance Instructions.* Upon completion of any public swimming pool or water attraction, the owner or owner's agent shall be given complete written instructions concerning operation of the pool or water attraction, all equipment, the circulation system, and the maintenance of the water quality.

(c) *Certification of compliance.* 1. Prior to the completion of the final inspection of any public swimming pool or water attraction, the supervising construction contractor, architect or engineer shall provide to the department a compliance statement.

2. The compliance statement shall certify that the installation is in compliance with this chapter.

3. The compliance statement shall be in a format acceptable to the department.

(2) **CONSTRUCTION INSPECTION.** (a) Every new installation, alteration or reconstruction of a public swimming pool or water attraction shall be inspected as required in this section.

(b) The construction, alteration or reconstruction of any public swimming pool or water attraction shall be inspected by an authorized representative of the department.

Note: See Appendix A-90.05 (2) for listing of additional authorized representatives of the department.

(c) 1. A rough-in inspection shall be conducted when the piping system is installed and before the piping system is covered.

2. The supervising construction contractor, architect or engineer shall notify the department's authorized representative by telephone when underground work is complete and ready for an inspection to be scheduled.

3. Except as provided under subd. 3., work may not proceed until the inspection has been completed.

4. If the inspection is not made by the end of the normal business day following the day of notification, not including Saturday, Sunday or legal holidays, the installation work may proceed.

(d) 1. A final inspection shall be made when the construction, alteration or reconstruction is complete.

Note: A final inspection includes, but is not limited to, sanitary facilities, pools, fences and decks.

2. The supervising construction contractor, architect or engineer shall notify the department's authorized representative by telephone when all work is complete and ready for an inspection to be scheduled.

3. A request for the final inspection shall be made at least 24 hours prior to the requested time for the inspection.

4. The final inspection shall be completed within 5 business days of the requested inspection date.

Note: Inspections are only available during standard business hours.

(e) The supervising construction contractor, architect or engineer shall provide the necessary equipment and personnel required for the inspection as requested by the authorized representative of the department.

(f) If the authorized representative of the department finds that the installation does not comply with this chapter, necessary corrections shall be made to achieve compliance. The authorized representative of the department shall be notified by the supervising construction contractor, architect or engineer when the corrections are completed.

(3) AUTHORIZED INSPECTION AGENT. (a) Upon request from a governmental unit, the department may delegate to the governmental unit the responsibility to conduct construction inspections of any public swimming pool or water attraction in accordance with this section.

(b) The delegation of inspection authority by the department shall be contingent upon a request by the governmental unit demonstrating sufficient capabilities to complete the construction inspections.

(c) The department shall provide the governmental unit with a written decision of authorization or denial relative to the request under this subsection concerning construction inspection.

(d) The department shall monitor and periodically evaluate the construction inspection functions that are authorized to the governmental unit under this section.

(e) If a governmental unit wishes to discontinue the authorized construction inspection function under this section, written notification shall be made to the department at least 30 days prior to the discontinuance.

(f) The authorization to conduct construction inspections may be revoked by the department at the department's sole discretion.

Comm 90.07 Fines. Any person who violates this chapter or any plan or specification included as part of an approval that is issued under this chapter shall be fined pursuant to s. 145.26 (6) not less than \$100 nor more than \$5,000 for each violation. Each day of continued violation is a separate offense.

Subchapter II – The Design of Public Swimming Pool and Water Attractions

Comm 90.10 Minimum design requirements. (1) GENERAL REQUIREMENTS. (a) Any construction or alteration of a pool or water attraction shall be designed and installed as specified under this subchapter.

(b) The design of pools and water attractions shall be based on generally accepted engineering practices. Some of the details of design, construction and installation may vary from the specifications of this code, but the basic engineering principles desirable and necessary to protect the health and safety of pool users and patrons shall be used by the department for situations not addressed in this subchapter.

(2) LOCATION. Pools and water attractions shall be located on a site conducive to proper operation, maintenance and safety of the pool or water attraction. The site shall be well drained.

(3) STRUCTURAL STABILITY. All pools and water attractions shall be designed and installed to be structurally sound.

(4) MATERIALS. (a) Pools and water attraction surfaces shall be impervious, easy to clean, inert and nontoxic to humans.

(b) Pools and water attractions shall be constructed of materials that do not create a toxic condition in the environment.

(5) FREEZING. Where subject to freezing temperatures, the basin and appurtenances, piping, filter system, pump and motor and other components shall be designed and constructed to facilitate protection from damage due to freezing.

(6) EQUIPMENT AND MATERIAL APPROVAL. All material and equipment used in the operation of a pool or water attraction within the scope of ANSI/NSF 50 shall conform to ANSI/NSF 50 or the equivalent.

(7) VENTILATION. Ventilation shall be provided for all indoor pools and water attractions.

Note: See Comm 64 for requirements for ventilation.

(8) SLIP RESISTANCE. (a) The surfaces intended to provide patron footing within the pool enclosure or on the deck shall have a slip-resistant surface.

(b) The surfaces intended to provide patron footing include patron walkways, deck, stair treads, zero-depth entries and water levels less than 24 inches in depth.

Note: Slide flume surfaces are not intended to provide patron footing.

(9) CONSTRUCTION TOLERANCES. Construction tolerances may not exceed the applicable design dimensions beyond those designated in Table 90.10.

Table 90.10
Construction Tolerances

| Design Dimension | Construction Tolerance Permitted |
|--|----------------------------------|
| Water depth in areas greater than 5' deep | $\pm 3''$ |
| Water Depth in areas up to 5' deep | $\pm 2''$ |
| Floor nozzle protrusion | $\pm 1/8''$ |
| Stair treads and risers | $\pm 1/2''^a$ |
| Waterline for skimmer pools ^b | $\pm 1/4''$ |
| Waterline for gutter and overflow trench pools | $\pm 1/8''$ |
| Wall variance from vertical | $\pm 3^\circ$ |

^a The construction tolerance is measured over the entire staircase at the center of the treads.

^b The construction tolerance for skimmer pools is measured as the difference between skimmer vertical center lines.

Comm 90.11 Basin design. (1) GENERAL. (a) Except as provided in par. (b) or (c), pool and water attraction basins shall conform to all of the requirements in this section.

(b) Therapy pool basin designs shall comply with the basic principles in s. Comm 90.10 (1) (b).

(c) Competition pool basins may be designed in accordance with the standards of the sanctioning organization.

(d) Competition pool basins that do not comply with s. 90.10 (8) and made available for open swim shall be permitted only where another pool or water attraction, that complies with s. 90.10 (8) is available at the site for open swim.

(2) STRESS RELIEF. Provision shall be made for the relief of stress to basin walls and floors which may occur as a result of unbalanced hydrostatic pressures.

(3) DIVING AREAS. (a) Basins that include diving apparatus shall conform to one of the following:

1. The basin shall comply with the standards in this subsection.

2. The basin shall comply with the standards of a sanctioning organization acceptable to the department.

Note: See the appendix for further information.

(b) The design of a basin that includes a diving area shall comply with the profiles in Figure 90.11-1 and Table 90.11-1.

Figure 90.11-1
Diving Area Dimensions

