

INTRODUCTION:

THE FLORIDA BUILDING COMMISSION HAS ADOPTED VARIOUS CHANGES TO THE FLORIDA BUILDING CODE FOR BOTH RESIDENTIAL AND COMMERCIAL SWIMMING POOLS AS PART OF THE 2007 FLORIDA BUILDING CODES WHICH REMAIN IMPORTANT IN THE 2010.

THE PURPOSE OF THIS ONLINE CLASS IS TO UPDATE YOU WITH THE MAJOR CHANGES THAT HAVE BEEN ADOPTED AND TO ALSO GIVE YOU BASIC INFORMATION REGARDING THE ANSI/APSP7 STANDARDS THAT HAVE BEEN ADOPTED BY REFERENCE AND TO INFORM YOU OF RULES ADOPTED BY THE FLORIDA DEPARTMENT OF HEALTH THAT WILL ALSO IMPACT THE BUILDING, REMODELING AND OPERATION OF ALL COMMERCIAL SWIMMING POOLS.

IN ADDITION, FLORIDA COMMERCIAL SWIMMING POOLS ALSO MUST COMPLY WITH FEDERAL REGULATIONS REGARDING ENTRAPMENT (THE VIRGINIA GRAHAM BAKER POOL AND SPA SAFETY ACT-VGB). THIS HISTORIC PIECE OF LEGISLATION IS, WE BELIEVE, THE FIRST FEDERAL US LEGISLATION REGULATING COMMERCIAL SWIMMING POOLS. ENFORCEMENT IS THE RESPONSIBILITY OF THE CONSUMER PRODUCT SAFETY COMMISSION. HOWEVER, SINCE FEDERAL LAWS HAVE PRECEDENCE OVER STATE LAWS AND REGULATIONS MOST STATES ARE ADOPTING THIS NEW FEDERAL CODE INTO THEIR REGULATIONS.

THIS CLASS IS NOT INTENDED TO INFORM YOU OF ALL OF THESE REQUIREMENTS NOR IS IT INTENDED TO SUPPLEMENT OR TO INTERPRET THE CODE. YOU SHOULD NOT RELY ON THE INFORMATION INCLUDED IN THIS COURSE TO GUIDE YOU IN BUILDING OR OPERATING POOLS. OUR INTENT IS ONLY TO BRING TO YOUR ATTENTION WHAT WE HAVE INTERPRETED TO BE THE MOST IMPORTANT SECTIONS IN THE CODE SO THAT YOU CAN HAVE KNOWLEDGE ABOUT THE BREADTH OF THESE SECTIONS AND HOW THEY MAY IMPACT YOUR BUSINESS.

ATI HIGHLY RECOMMENDS THAT YOU GET A COPY OF ALL OF THE CODES REFERENCED. WE ALSO RECOMMEND THAT YOU MAY WISH TO ORDER A COPY OF THE FLORIDA SWIMMING POOL ASSOCIATION'S (FSPA) 2007 FLORIDA BUILDING CODE AND COMMENTARY WHICH YOU CAN ORDER DIRECTLY FROM THE FSPA (DOES NOT APPEAR THAT THIS IS UPDATED).

YOU MAY FIND THE FOLLOWING SEGMENTS OF THIS PROGRAM PARTICULARLY INTERESTING AND USEFUL:

THE FINAL INSPECTION REQUIREMENTS.

THE ANSI/APSP-7 STANDARD.

POOL PIPING PRESSURE TEST PROCEDURES AND WHEN THEY ARE REQUIRED.

THE REFERENCED REFERRED TO REGARDING BOAF NON-BINDING INTERPRETATIONS.

FBC DECLARATORY STATEMENTS.

RELATIONSHIP BETWEEN THE FBC CODES AND THE DOH REQUIREMENTS.

2010 FLORIDA BUILDING CODE RESIDENTIAL SWIMMING POOLS, CHAPTER 41.

(NOTE THAT CHAPTER 41 IS IDENTICAL TO SECTION 424.2 OF THE FLORIDA BUILDING CODE.)

R4101.1 DEFINITIONS:

BARRIER- A FENCE, DWELLING WALL OR NONDWELLING WALL OR ANY COMBINATION THEREOF WHICH COMPLETELY SURROUNDS THE SWIMMING POOL AND OBSTRUCTS ACCESS TO THE SWIMMING POOL, ESPECIALLY ACCESS FROM THE RESIDENCE OR FROM THE YARD OUTSIDE THE BARRIER. NOTE THAT EXTERIOR WALLS OF THE DWELLING CAN BE INCLUDED IF ALARM AND LOCK REGULATIONS ARE FOLLOWED.

POOL PERIMETER. A POOL PERIMETER IS DEFINED BY THE LIMITS OF THE POOL DECK, IT'S SURROUNDING AREA INCLUDING YARD AREA ON SAME PROPERTY, AND ANY DWELLING OR NON DWELLING WALL OR ANY COMBINATION THEREOF WHICH COMPLETELY SURROUNDS THE POOL. NOTE THAT CHANGE WAS MADE TO INCLUDE FENCES THAT SURROUND THE PROPERTY THUS ELIMINATING THE NEED FOR DUAL FENCING.

SWIMMING POOL, PRIVATE. ANY STRUCTURE, LOCATED IN A RESIDENTIAL AREA, THAT IS INTENDED FOR SWIMMING OR RECREATIONAL BATHING AND CONTAINS WATER OVER 24 INCHES (610 MM) DEEP INCLUDING BUT NOT LIMITED TO INGROUND, ABOVEGROUND, AND ONGROUND SWIMMING POOLS, HOT TUBS, AND NONPORTABLE SPAS. NOTE THAT THIS CHANGE INCORPORATES ALL TYPES OF POOLS/SPAS/ETC. EXCEPT FOR PORTABLE SPAS.

ENGINEERING DESIGN:

CONFORMANCE STANDARD. DESIGN, CONSTRUCTION AND WORKMANSHIP SHALL BE IN CONFORMITY WITH THE REQUIREMENTS OF ANSI/NSPI 3; ANSI/NSPI 4; ANSUNSPA 5; ANSI/NSPI 6; AND ANSI/APSP 7. NOTE THAT ANSI/NSPI 3 COVERS NONPORTABLE SPAS, 4 COVERS ABOVEGROUND AND ONGROUND POOLS, 5 COVERS INGROUND POOLS, 6 COVERS PORTABLE SPAS AND HOT TUBS AND 7 COVERS SUCTION ENTRAPMENTS IN ALL INCLUDING CATCH BASINS.

R4101.6.6 ENTRAPMENT PROTECTION FOR SUCTION OUTLETS SHALL BE INSTALLED IN ACCORDANCE WITH REQUIREMENTS OF ANSI/APSP 7. ADDITIONAL INFORMATION ABOUT ANSI/APSP-7 WILL BE INCLUDED LATER IN THIS COURSE.

R4101.12.1 PRESSURE TEST. ALL POOL PIPING SHALL BE TESTED AND PROVED TIGHT TO THE SATISFACTION OF THE ADMINISTRATIVE AUTHORITY, UNDER A STATIC WATER OR AIR PRESSURE TEST OF NOT LESS THAN 35 POUNDS PER SQUARE INCH (PSI) (241 KPA) FOR 15 MINUTES.

EXCEPTION: CIRCULATING PUMPS NEED NOT BE TESTED AS REQUIRED IN THIS SECTION. NOTE THAT NO VISUAL INSPECTION PRIOR TO BURIAL IS REQUIRED THUS MINIMIZING THE POSSIBILITY OF "FLOATING" IF THE WATER TABLE IS HIGH.

R4101.16 ELECTRICAL. ELECTRICAL WIRING AND EQUIPMENT SHALL COMPLY WITH CHAPTER 27 OF THE FLORIDA BUILDING CODE. NOTE THAT SIGNIFICANT CHANGES TO BONDING REQUIREMENT ARE ADDRESSED IN THIS PART OF THE CODE. IT NOW RECOGNIZES THAT MOST IF NOT ALL OF THIS REQUIREMENT IS MET THRU THE PROPER INSTALLATION OF THE STEEL REINFORCEMENT IN A CONCRETE POOL.

R4101.17 RESIDENTIAL SWIMMING BARRIER REQUIREMENT.

RESIDENTIAL SWIMMING POOLS SHALL COMPLY WITH SECTIONS R4101.17.1 THROUGH R4101.17.3.

EXCEPTION: A SWIMMING POOL WITH AN APPROVED SAFETY POOL COVER COMPLYING WITH ASTM F 1346 NOTE THAT THIS NOW ALLOWS FOR THE COVER TO MEET THE BARRIER REQUIREMENT ONLY WHEN THE COVER MEETS ATSM F 1346 REQUIREMENTS.

ALSO NOTE THAT THE PROVISIONS OF THIS SECTION REQUIRE A REMOVABLE FENCE TO HAVE ONE END SECURED WITH A METHOD REQUIRING TOOLS TO BE REMOVED, THAT SIGNIFICANT PROVISIONS ARE MADE TO MAKE FENCES DIFFICULT TO CLIMB, SELF CLOSING/LATCHING GATES ARE REQUIRED (INCLUDING NON ALARMED DWELLING DOORS LEADING TO THE POOL) AND INDOOR POOLS HAVE THE SAME REQUIREMENTS AS OUTDOOR POOLS.

R4101.19 FINAL INSPECTION. FINAL ELECTRICAL, AND BARRIER CODE, INSPECTION SHALL BE COMPLETED PRIOR TO FILLING THE POOL WITH WATER.

EXCEPTION: VINYL LINER AND FIBERGLASS POOLS ARE REQUIRED TO BE FILLED WITH WATER UPON INSTALLATION. NOTE THAT THIS ADDITION RECOGNIZES THE REQUIREMENT THAT THESE POOLS MUST BE FILLED IMMEDIATELY FOLLOWING INSTALLATION TO BE INSTALLED PROPERLY AND SAFELY.

R4101.21.3 MAIN OUTLET. AN APPROVED MAIN OUTLET, WHEN PROVIDED, SHALL BE LOCATED ON A WALL OR FLOOR AT OR NEAR THE DEEPEST POINT IN THE POOL FOR EMPTYING OR CIRCULATION, OR BOTH, OF THE WATER IN THE POOL. NOTE THAT THIS RECOGNIZES THAT A POOL CAN BE CONSTRUCTED WITHOUT MAIN FLOOR OUTLETS.

SECTION 424.1 PUBLIC SWIMMING POOLS AND BATHING PLACES

2010 FLORIDA BUILDING CODE

THE FOLLOWING CHANGES TO THE POOL CODE WENT INTO EFFECT IN MARCH 2009 AND REMAIN IN THE PRESENT CODE:

THIS PROGRAM ONLY INCLUDES SUBJECTS DEEMED BY THE AUTHOR TO BE SIGNIFICANT CHANGES AND DO NOT INCLUDE ALL OF THE CHANGES MADE.

424.1 PUBLIC SWIMMING POOLS AND BATHING PLACES. PUBLIC SWIMMING POOLS AND BATHING PLACES SHALL COMPLY WITH THE DESIGN AND CONSTRUCTION STANDARDS OF THIS SECTION.

NOTE: OTHER ADMINISTRATIVE AND PROGRAMMATIC PROVISIONS MAY APPLY. SEE DEPARTMENT OF HEALTH (DOH) RULE 64E-9, FLORIDA ADMINISTRATIVE CODE AND CHAPTER 514, FLORIDA STATUTES.

THE CHANGES TO 64E ARE ADDRESSED LATER IN THIS PROGRAM.

"COLLECTOR TANK" MEANS A RESERVOIR, WITH A MINIMUM OF 2.25 SQUARE FEET WATER SURFACE AREA OPEN TO THE ATMOSPHERE, FROM WHICH THE RECIRCULATION OR FEATURE PUMP TAKES SUCTION, WHICH MAY RECEIVES THE GRAVITY FLOW FROM THE MAIN DRAIN LINE AND SURFACE OVERFLOW SYSTEM OR FEATURE WATER

SOURCE LINE.

“EFFECTIVE BARRIER” – A BARRIER WHICH CONSISTS OF A BUILDING, OR EQUIVALENT STRUCTURE, PLUS A 48 INCH MINIMUM HEIGHT FENCE ON THE REMAINING SIDES OR A CONTINUOUS 48 INCH MINIMUM HEIGHT FENCE. ALL ACCESS THROUGH THE BARRIER MUST HAVE ONE OR MORE OF THE FOLLOWING SAFETY FEATURES: ALARM, KEY LOCK OR SELF-LOCKING DOORS AND GATES. SAFETY COVERS THAT COMPLY WITH THE AMERICAN SOCIETY FOR TESTING MATERIALS STANDARD F1346 MAY ALSO BE CONSIDERED AS AN EFFECTIVE BARRIER.

“MARKING” OR “MARKINGS” – REFERS TO THE PLACEMENT AND INSTALLATION OF VISUAL MARKING CUES TO HELP PATRONS IDENTIFY STEP, BENCH AND SWIMOUT OUTLINES, SLOPE BREAK LOCATION, DEPTH DESIGNATIONS, AND NO ENTRY AND NO DIVING WARNINGS. WHEN MARKINGS ARE SPECIFIED BY CODE TO BE DARK THE TERM DARK SHALL MEAN A MUNSELL COLOR VALUE FROM ZERO TO FOUR.

SECTION 424.1.1 SIZING – THE BATHING LOAD FOR CONVENTIONAL SWIMMING POOLS AND SPECIAL PURPOSE POOLS SHALL BE COMPUTED ON THE BASIS OF ONE PERSON PER FIVE GALLONS PER MINUTE (GPM) OF RECIRCULATION FLOW. THE BATHING LOAD FOR WADING POOLS AND INTERACTIVE WATER FEATURES SHALL BE ESTABLISHED BY AVERAGING ONE PERSON PER 20 SQUARE FEET OF POOL AREA AND ONE PERSON PER 5 GALLONS PER MINUTE OF FILTER RATE. THE BATHING LOAD FOR SPA TYPE POOLS SHALL BE BASED ON ONE PERSON PER EACH 10 SQUARE FEET OF SURFACE AREA. THE FILTRATION SYSTEM SHALL BE CAPABLE OF MEETING ALL OTHER REQUIREMENTS OF THESE RULES WHILE PROVIDING A FLOWRATE OF AT LEAST ONE GALLON PER MINUTE FOR EACH LIVING UNIT AT TRANSIENT FACILITIES AND THREE-FOURTHS GALLON PER MINUTE AT NON-TRANSIENT FACILITIES. ALL OTHER TYPES OF PROJECTS SHALL BE SIZED ACCORDING TO THE ANTICIPATED BATHING LOAD AND PROPOSED USES. FOR THE PURPOSE OF DETERMINING MINIMUM POOL SIZE ONLY, THE POOL TURNOVER PERIOD USED CANNOT BE LESS THAN THREE HOURS.

424.1.2.1 POOL STRUCTURE. POOLS SHALL BE CONSTRUCTED OF CONCRETE OR OTHER IMPERVIOUS AND STRUCTURALLY RIGID MATERIAL. ALL POOLS SHALL BE WATERTIGHT, FREE FROM STRUCTURAL CRACKS AND SHALL HAVE A NONTOXIC SMOOTH AND SLIP-RESISTANT FINISH. FLOORS AND WALLS SHALL BE WHITE OR PASTEL IN

COLOR AND SHALL HAVE THE CHARACTERISTICS OF REFLECTING RATHER THAN ABSORBING LIGHT. TILE USED IN LESS THAN 5 FEET (1524 MM) OF WATER MUST BE SLIP RESISTANT. A MINIMUM 4 INCH TILE LINE SHALL BE INSTALLED AT THE WATER LINE, BUT SHALL NOT EXCEED 12 INCHES IN HEIGHT IF A DARK COLOR IS USED. GUTTER TYPE POOLS MAY SUBSTITUTE 2-INCH TILE ALONG THE POOL WALL EDGE OF THE GUTTER LIP.

424.1.2.2.2 WALLS AND CORNERS. ALL POOL WALLS SHALL HAVE A CLEARANCE OF 15 FEET (4572 MM) PERPENDICULAR TO THE WALL. OFFSET STEPS AND SPA COVES ARE EXEMPT FROM THIS CLEARANCE REQUIREMENT. WHERE INTERIOR STEPS PROTRUDE INTO THE POOL RESULTING IN LESS THAN 15 FEET OF CLEARANCE FROM ANY WALL SUCH PROTRUSION SHALL NOT EXCEED SIX FEET ON ANY PERPENDICULAR LINE FROM A TANGENT TO ANY POOL WALL FROM WHICH THE STEPS EMANATE. THE UPPER PART OF POOL WALLS IN AREAS 5 FEET DEEP OR LESS SHALL BE WITHIN 5 DEGREES (4572 MM) VERTICAL FOR A MINIMUM DEPTH OF 2½ FEET (762 MM) FROM WHICH POINT THE WALL MAY JOIN THE FLOOR WITH A MAXIMUM RADIUS EQUAL TO THE DIFFERENCE BETWEEN THE POOL DEPTH AND 2½ FEET. THE UPPER PART OF POOL WALLS IN AREAS OVER 5 FEET DEEP SHALL BE WITHIN 5 DEGREES VERTICAL FOR A MINIMUM DEPTH EQUAL TO THE POOL WATER DEPTH MINUS 2½ FEET (762 MM) FROM WHICH POINT THE WALL MAY JOIN THE FLOOR WITH A MAXIMUM RADIUS OF 2½ FEET (762 MM). CORNERS SHALL BE A MINIMUM 90-DEGREE ANGLE. THE CORNER INTERSECTIONS OF WALLS WHICH PROTRUDE OR ANGLE INTO THE POOL WATER AREA SHALL BE ROUNDED WITH A MINIMUM RADIUS OF 2 INCHES (51 MM).

424.1.2.2.3.2 ANY TRANSITION IN FLOOR SLOPE SHALL OCCUR AT A MINIMUM OF 5 FEET (1524 MM) OF WATER DEPTH. A SLOPE TRANSITION MUST HAVE A 2 TO 6 INCH WIDE DARK CONTRASTING TILE MARKING ACROSS THE BOTTOM AND MUST EXTEND UP BOTH SIDES OF THE POOL AT THE TRANSITION POINT. THE MARKING SHALL BE CONTINUOUS EXCEPT FOR RECESSING GROUTING. A SLOPE TRANSITION MUST HAVE A SAFETY LINE MOUNTED BY USE OF RECESSED CUP ANCHORS, 2 FEET (610 MM) BEFORE THE CONTRASTING MARKING, TOWARDS THE SHALLOW END. THE SAFETY LINE SHALL HAVE VISIBLE FLOATS AT MAXIMUM 7-FOOT (2134 MM) INTERVALS.

1. THE MINIMUM MAXIMUM WATER DEPTH SHALL BE 3 FEET IN SHALLOW AREAS AND 4 FEET IN DEEP AREAS.

5. WHEN DECK LEVEL PERIMETER OVERFLOW SYSTEMS ARE UTILIZED, ADDITIONAL DEPTH MARKING SIGNS SHALL BE POSTED NEARBY OR PLACED ON ADJACENT FENCING OR WALLS AND THE SIZE SHALL BE INCREASED SO THEY ARE RECOGNIZABLE FROM INSIDE THE SWIMMING POOL. ALTERNATIVELY TILE DEPTH MARKERS MAY BE PLACED AT THE TOP OF THE POOL WALL JUST UNDER THE WATER LEVEL. DEPTH MARKERS PLACED ON THE POOL DECK SHALL BE WITHIN 3 THREE FEET OF THE WATER.

7. ALL DEPTH MARKINGS SHALL BE TILE, EXCEPT THAT POOLS CONSTRUCTED OF FIBERGLASS, THERMOPLASTIC OR STAINLESS STEEL MAY SUBSTITUTE OTHER TYPE MARKINGS WHEN IT CAN BE SHOWN THAT SAID MARKINGS ARE PERMANENT AND WILL NOT FADE OVER TIME. THIS EXEMPTION DOES NOT EXTEND TO CONCRETE POOLS THAT ARE COATED WITH FIBERGLASS. TILE ALTERNATIVE EXAMPLES INCLUDE STONE OR MANUFACTURED PLAQUES WITH ENGRAVED OR SANDBLASTED NUMBERS AND CHARACTERS WITH PERMANENT PAINT. PERMANENT APPLIQUÉS MAY BE USED FOR FIBERGLASS, THERMOPLASTIC OR STAINLESS STEEL POOLS. ALL MARKINGS INSTALLED ON HORIZONTAL SURFACES SHALL HAVE A SLIP RESISTANT FINISH. MARKINGS SHALL BE FLUSH WITH THE SURROUNDING AREA WHERE PLACED AND RECESSED IF NECESSARY TO PROVIDE A SMOOTH FINISH THAT WILL AVOID CREATION OF AN INJURY HAZARD TO BATHERS. POOLS THAT ARE NOT CONDUCIVE TO TILE CAN EMPLOY OTHER EQUIVALENT MARKINGS AS STATED ABOVE.

424.1.2.5.1 LADDERS. LADDERS SHALL BE OF THE CROSS-BRACED TYPE AND SHALL BE CONSTRUCTED OF CORROSION-RESISTANT MATERIALS AND BE SECURELY ANCHORED INTO THE POOL DECK. CLEARANCE BETWEEN THE LADDER AND POOL WALL SHALL BE BETWEEN 3 TO 6 INCHES (76 MM TO 152 MM). LADDERS SHALL EXTEND AT LEAST 28 INCHES (711 MM) ABOVE THE POOL DECK. LADDER BOTTOM BRACES SHALL HAVE INTACT END CAPS OR BUMPERS THAT REST FIRMLY AGAINST THE POOL WALL.

424.1.2.5.3 STAIRS. STAIRS SHALL HAVE A MINIMUM TREAD WIDTH OF 10 INCHES (254 MM) AND A MAXIMUM WIDTH OF 48 INCHES FOR A MINIMUM TREAD LENGTH OF 24 INCHES (610 MM) AND A MAXIMUM RISER HEIGHT OF 10 INCHES (254 MM). TREADS AND RISERS BETWEEN THE TOP AND BOTTOM TREADS SHALL BE UNIFORM TO WITHIN 1/2 INCH IN WIDTH AND HEIGHT. THE RISER HEIGHTS SHALL BE MEASURED AT THE MARKED STEP EDGES AND THE DIFFERENCES IN ELEVATION SHALL BE CONSIDERED THE RISER

HEIGHTS. THE FRONT $\frac{3}{4}$ TO 2 INCHES (19.1 TO 51 MM) OF THE TREAD AND THE TOP 2 INCHES (51MM) OF THE RISER SHALL BE TILE, DARK IN COLOR, CONTRASTING WITH THE INTERIOR OF THE POOL. TILE SHALL BE SLIP RESISTANT. BULLNOSE TILE MAY BE USED WHEN THE $\frac{3}{4}$ INCH (19 MM) SEGMENT IS PLACED ON THE TREAD OR HORIZONTAL SURFACE AND THE 2-INCH (51MM) SEGMENT IS PLACED ON THE RISER OR VERTICAL SURFACE.

424.1.2.6 OBSTRUCTIONS. THE POOL WATER AREA SHALL BE UNOBSTRUCTED BY ANY TYPE STRUCTURE UNLESS JUSTIFIED BY ENGINEERING DESIGN AS A PART OF THE RECIRCULATION SYSTEM. ENGINEERING DESIGN AND MATERIAL SPECIFICATIONS SHALL SHOW THAT SUCH STRUCTURES WILL NOT ENDANGER THE POOL PATRON, CAN BE MAINTAINED IN A SANITARY CONDITION AND WILL NOT CREATE A PROBLEM FOR SANITARY MAINTENANCE OF ANY PART OF THE POOL, POOL WATER, OR POOL FACILITIES. STRUCTURES IN ACCORD WITH THE ABOVE SHALL NOT BE LOCATED IN A DIVING BOWL AREA OR WITHIN 15 FEET (4572 MM) OF ANY POOL WALL.

EXCEPTIONS:

1. STAIRS, LADDERS AND RAMPS, NECESSARY FOR ENTRANCE/EXIT FROM THE POOL ARE NOT CONSIDERED OBSTRUCTIONS.
2. UNDERWATER SEAT BENCHES MAY BE INSTALLED IN AREAS LESS THAN FIVE 5 FEET (1524 MM) DEEP. BENCH SEATS MUST BE 14 TO 18 INCHES (356 TO 457 MM) WIDE AND MUST HAVE A DARK CONTRASTING TILE MARKING ON THE SEAT EDGE EXTENDING TWO 2 INCHES (51 MM) ON THE HORIZONTAL AND VERTICAL SURFACE. IF TILE IS USED IT MUST BE SLIP RESISTANT. BULLNOSE TILE MAY BE SUBSTITUTED AND INSTALLED IN ACCORDANCE WITH SECTION 424.1.2.5.3. BENCHES SHALL NOT PROTRUDE INTO THE 15 FOOT CLEARANCE REQUIREMENT OF SECTION 424.1.2.6.

424.1.3.1.6 TEN PERCENT OF THE DECK ALONG THE POOL PERIMETER MAY BE OBSTRUCTED. OBSTRUCTIONS SHALL HAVE A WET DECK AREA BEHIND OR THROUGH THEM, WITH THE NEAR EDGE OF THE WALK WITHIN 15 FEET (4572 MM) OF THE WATER EXCEPT APPROVED SLIDE OBSTRUCTIONS SHALL HAVE THE NEAR EDGE OF THE WALK WITHIN 35 FEET OF THE WATER. THESE OBSTRUCTIONS MUST SHALL BE PROTECTED BY A BARRIER OR MUST SHALL BE DESIGNED TO DISCOURAGE PATRON ACCESS. WHEN AN OBSTRUCTION EXISTS IN MULTIPLE AREAS AROUND THE POOL THE MINIMUM DISTANCE BETWEEN OBSTRUCTIONS SHALL BE 4 FEET (1219 MM).

424.1.3.1.9 ALL PUBLIC POOLS SHALL BE SURROUNDED BY A MINIMUM 48 INCH HIGH FENCE. THE FENCE SHALL BE CONTINUOUS AROUND THE PERIMETER OF THE POOL AREA THAT IS NOT OTHERWISE BLOCKED OR OBSTRUCTED BY ADJACENT BUILDINGS OR STRUCTURES AND SHALL ADJOIN WITH ITSELF OR ABUT TO THE ADJACENT MEMBERS. ACCESS THROUGH THE BARRIER OTHER THAN FROM DOORED EXITS OF ADJACENT BUILDING(S) SHALL BE THROUGH SELF-CLOSING SELF-LATCHING LOCKABLE GATES OF 48 INCH MINIMAL HEIGHT WITH THE LATCH LOCATED A MINIMUM OF 54 INCHES FROM THE BOTTOM OF THE GATE OR AT LEAST 3 INCHES BELOW THE TOP OF THE GATE ON THE POOL SIDE. GATES SHALL OPEN OUTWARD AWAY FROM THE POOL AREA. CONSIDERATION SHALL BE GIVEN TO THE U.S. CONSUMER PRODUCT SAFETY COMMISSION (CPSC) PUB. No. 362 GUIDELINES. SAFETY COVERS THAT COMPLY WITH ASTM F 1346 DO NOT SATISFY THIS REQUIREMENT.

424.1.4.2.1 OUTDOOR POOL LIGHTING. OVERHEAD LIGHTING SHALL PROVIDE A MINIMUM OF 3 FOOT-CANDLES (30 LUX) OF ILLUMINATION AT THE POOL WATER SURFACE AND THE POOL WET DECK SURFACE. UNDERWATER LIGHTING SHALL BE A MINIMUM OF ½ WATT PER SQUARE FOOT OF POOL WATER SURFACE AREA.

SECTION 424.1.4.2.2 INDOOR POOL LIGHTING, REVISE TEXT TO READ AS FOLLOWS:

424.1.4.2.2 INDOOR POOL LIGHTING. OVERHEAD LIGHTING SHALL PROVIDE A MINIMUM OF 10 FOOT CANDLES OF ILLUMINATION AT THE POOL WATER SURFACE AND THE POOL WET DECK SURFACE. UNDERWATER LIGHTING SHALL BE A MINIMUM OF 8/10 WATT PER SQUARE FOOT OF POOL SURFACE AREA.

424.1.4.2.4 OVERHEAD WIRING. OVERHEAD SERVICE WIRING SHALL NOT PASS WITHIN AN AREA EXTENDING A DISTANCE OF 10 FEET HORIZONTALLY AWAY FROM THE INSIDE EDGE OF THE POOL WALLS, DIVING STRUCTURES, OBSERVATION STANDS, TOWERS, OR PLATFORMS. ELECTRICAL EQUIPMENT WIRING AND INSTALLATION INCLUDING THE GROUNDING OF POOL COMPONENTS SHALL COMPLY WITH CHAPTER 27 OF THE FLORIDA BUILDING CODE, BUILDING

424.1.5.3 MATERIALS. THE EQUIPMENT ENCLOSURE, AREA OR ROOM FLOOR SHALL BE OF CONCRETE OR OTHER NONABSORBENT MATERIAL HAVING A SMOOTH SLIP-RESISTANT FINISH AND SHALL HAVE POSITIVE DRAINAGE, INCLUDING A SUMP PUMP IF NECESSARY. ANCILLARY EQUIPMENT, SUCH AS A HEATER, NOT CONTAINED IN AN

EQUIPMENT ENCLOSURE OR ROOM SHALL NECESSITATE EQUIPMENT AREA AS DESCRIBED ABOVE.

424.1.5.6 SIZE. THE SIZE OF THE EQUIPMENT ENCLOSURE, ROOM OR AREA SHALL PROVIDE WORKING SPACE TO PERFORM ROUTINE OPERATIONS. CLEARANCE SHALL BE PROVIDED FOR ALL EQUIPMENT AS PRESCRIBED BY THE MANUFACTURER TO ALLOW NORMAL MAINTENANCE OPERATION AND REMOVAL WITHOUT DISTURBING OTHER PIPING OR EQUIPMENT. IN ROOMS WITH FIXED CEILINGS, THE MINIMUM HEIGHT SHALL BE 7 FEET (2137 MM).

424.1.5.8 STORAGE. EQUIPMENT ENCLOSURES, ROOMS OR AREAS SHALL NOT BE USED FOR STORAGE OF CHEMICALS EMITTING CORROSIVE FUMES OR FOR STORAGE OF OTHER ITEMS TO THE EXTENT THAT ENTRANCE TO THE ROOM FOR INSPECTION OR OPERATION OF THE EQUIPMENT IS IMPAIRED.

424.1.6.1 SANITARY FACILITIES. SEPARATE SANITARY FACILITIES SHALL BE PROVIDED AND LABELED FOR EACH SEX AND SHALL BE LOCATED WITHIN A 200-FOOT (60 960 MM) WALKING DISTANCE RADIUS OF THE NEAREST WATER'S EDGE OF EACH POOL SERVED BY THE FACILITIES.

EXCEPTION: WHERE A SWIMMING POOL SERVES ONLY A DESIGNATED GROUP OF RESIDENTIAL DWELLING UNITS AND NOT THE GENERAL PUBLIC, POOLSIDE SANITARY FACILITIES ARE NOT REQUIRED IF ALL LIVING UNITS ARE WITHIN A 200-FOOT (60 960 MM) RADIUS OF THE NEAREST WATER'S EDGE, ARE NOT OVER THREE STORIES IN HEIGHT UNLESS SERVICED BY AN ELEVATOR, AND ARE EACH EQUIPPED WITH PRIVATE SANITARY FACILITIES.

424.1.6.1.1 REQUIRED FIXTURES. FIXTURES SHALL BE PROVIDED AS INDICATED ON TABLE 424.1.6.1. WHEN MULTIPLE FIXTURE SETS ARE REQUIRED AND SEPARATE FACILITIES ARE PROVIDED FOR EACH SEX THE FIXTURES USED IN ANCILLARY FAMILY STYLE RESTROOMS CAN BE USED TO MEET THE REQUIREMENTS OF SECTION

424.1.6.1.1 DIAPER CHANGING TABLES SHALL BE PROVIDED AT FACILITIES THAT CATER TO FAMILIES WITH SMALL CHILDREN.

ONE DIAPER CHANGING TABLE SHALL BE PROVIDED AT EACH RESTROOM. DIAPER CHANGING TABLES ARE NOT REQUIRED AT RESTROOMS WHERE ALL POOLS SERVED ARE RESTRICTED TO ADULT USE ONLY. SWIM

DIAPERS ARE RECOMMENDED FOR USE BY CHILDREN THAT ARE NOT TOILET TRAINED. PERSONS THAT ARE ILL WITH DIARRHEA CANNOT ENTER THE POOL.

EXCEPTION: WHEN A PUBLIC SWIMMING POOL MEETS ALL OF THE FOLLOWING CONDITIONS THE FOLLOWING SHALL APPLY:

1. THE POOL SERVES ONLY A DESIGNATED GROUP OF DWELLING UNITS,
2. THE POOL IS NOT FOR THE USE OF THE GENERAL PUBLIC, AND
3. A BUILDING PROVIDES SANITARY FACILITIES;

THE FIXTURE REQUIREMENT FOR THE BUILDING SHALL BE DETERMINED AND IF IT EXCEEDS THE REQUIREMENT IN TABLE 424.1.6.1 THEN THE BUILDING REQUIREMENT SHALL REGULATE THE FIXTURE COUNT, OTHERWISE THE FIXTURE COUNT SHALL BE BASED ON THE REQUIREMENT FOR THE POOL. UNDER NO CIRCUMSTANCES SHALL THE FIXTURE COUNTS BE CUMULATIVE.

ANSI/APSP-7 AMERICAN NATIONAL STANDARD FOR SUCTION ENTRAPMENT

AVOIDANCE IN SWIMMING POOLS, WADING POOLS, SPAS, HOT TUBS AND CATCH

BASINS.

SINCE THIS STANDARD IS INCORPORATED BY REFERENCE IN BOTH THE PRIVATE AND PUBLIC FBC FOR 2007 THE FOLLOWING IS INTENDED TO MAKE YOU AWARE OF SOME OF THE REQUIREMENTS OF THIS STANDARD.

THE FOLLOWING IS THE AUTHORS COMMENTARY FROM ANSI/APSP-7 2006 STANDARD FOR SUCTION ENTRAPMENT AVOIDANCE IN SWIMMING POOLS, WADING POOLS, SPAS, HOT TUBS AND CATCH BASINS SECTIONS 3:DEFINITIONS, SECTION 4: GENERAL REQUIREMENTS FOR SUCTION ENTRAPMENT AVOIDANCE SYSTEMS AND COMPONENTS AND SECTION 5, NEW CONSTRUCTION.

THIS STANDARD REPRESENTS A CURRENT AND COMPLETE CONSENSUS STANDARD TO PREVENT SUCTION ENTRAPMENT.

FIVE TYPES OF ENTRAPMENT HAVE BEEN IDENTIFIED: HAIR ENTRAPMENT, LIMB ENTRAPMENT, BODY ENTRAPMENT, EVISCERATION/DISEMBOWELMENT AND MECHANICAL ENTRAPMENT.

THE THREE MAJOR CAUSES OF ENTRAPMENT ARE WATER FLOW THROUGH A COVER OR OUTLET, MECHANICAL ENTRAPMENT AND SUCTION ENTRAPMENT.

WATER FLOW THROUGH A COVER OR OUTLET IS PRIMARY CAUSES OF HAIR ENTRAPMENT.

MECHANICAL ENTRAPMENT IS THE USUAL CAUSE OF LIMB, CLOTHING AND JEWELRY ENTRAPMENT.

SUCTION IS THE USUAL CAUSE OF BODY ENTRAPMENT OR EVISCERATION.

THE FOLLOWING METHODS ARE EMBRACED IN THIS STANDARD TO PREVENT THESE ENTRAPMENT ISSUES:

POOLS DESIGNED TO BE OPERATED WITHOUT A MAIN DRAIN ARE ALLOWED BY THIS STANDARD. THE OBVIOUS RESULT IS THAT POOLS DESIGNED WITH ONE SUCTION OUTLET ON THE FLOOR REPRESENT A SUCTION HAZARD THAT IS ELIMINATED IF THAT OUTLET IS ELIMINATED. FLUID DYNAMICS HAVE SHOWN THAT A POOL DOES NOT NEED A MAIN DRAIN TO STAY CLEAN SINCE THE INLET JETS ARE THE PRIMARY SOURCE OF WATER FLOW.

THIS STANDARD REQUIRES THAT ALL SUBMERGED OUTLETS BE FITTED WITH APPROVED COVERS REGARDLESS OF THE SIZE. IT HAS BEEN SHOWN THAT ALL OF THE DEATHS THAT HAVE OCCURRED SO FAR DUE TO ENTRAPMENT COULD HAVE BEEN PREVENTED HAD THE POOL BEEN EQUIPPED WITH PROPER/APPROVED COVERS.

SUCTION COVERS MUST BE TESTED AS CONFORMING TO ASME/ANSI A112.19.8 2007 AND FOR THE FIRST TIME REQUIRES A BODY BLOCK TEST.

NEW CONSTRUCTION MUST HAVE MULTIPLE DRAINS, SINGLE UNBLOCKABLE DRAINS OR NO DRAINS (ALL RETURN WATER GOES THROUGH GUTTERS OR SKIMMERS).

FOR EXISTING POOLS THE STANDARD ALLOWS FOR THE DISABLEMENT OF A SINGLE DRAIN. IT ALSO ALLOWS CONVERTING THE DRAIN TO A RETURN INLET, ADDING A PROPERLY SPACED SECOND DRAIN OR SAFETY VACUUM RELEASE SYSTEMS (SVRS) THAT COMPLIES WITH ASME/ANSI A112.19.17 OR ASTM F2387, A SUCTION LIMITING VENT SYSTEM, GRAVITY DRAINAGE SYSTEM OR AUTOMATIC SHUT OFF SWITCH.

LIMITS WATER FLOW THROUGH DRAINS TO PREVENT HAIR ENTANGLEMENT.

REQUIRES THAT A POOL/SPA WITH ENTRAPMENT HAZARDS MUST BE CLOSED UNTIL REPAIRED ACCORDING TO THE STANDARD.

ANSI/APSP-7 STANDARD KEY FEATURES

	NEW CONSTRUCTION – ALLOWED OPTION?	EXISTING POOLS – ALLOWED OPTION?
NO DRAIN	YES	YES
SINGLE UNBLOCKABLE OUTLET	<p>YES</p> <p>FOLLOWING ARE APPROVED SINGLE UNBLOCKABLE SUCTION OUTLETS:</p> <ul style="list-style-type: none"> • CHANNEL OUTLET (AS SPECIFIED) • UNBLOCKABLE OUTLETS 18 INCHES X 23 INCHES OR LARGER • SWIM JET SYSTEM THAT COMPLIES WITH ASME/ANSI A112.19.8 • VENTURI-DRIVEN SYSTEM THAT COMPLIES WITH ASME/ANSI A112.19.8 OR ASTM F2387-04 	YES

	<ul style="list-style-type: none"> • GRAVITY FLOW SYSTEM • SUMPS IN SERIES 	
SINGLE BLOCKABLE OUTLET	NO	MUST BE RETROFITTED WITH ONE OF THE FOLLOWING OPTIONS: (1) A LISTED SINGLE UNBLOCKABLE SUCTION OUTLET, OR (2) A LISTED SUCTION OUTLET COVER/GRATE

		<p>AND AT LEAST ONE OF THE FOLLOWING</p> <ul style="list-style-type: none"> • ONE (OR MORE) LISTED SUCTION OUTLET WITH AN APPROVED COVER/GRATE (E.G., CREATE DUAL DRAINS) • PERMANENT DRAIN DISABLEMENT, OR • LISTED SVRS DEVICE, OR • ENGINEERED VENT SYSTEM, OR • GRAVITY FLOW SYSTEM, OR • CONVERT THE SUCTION OUTLET TO A RETURN INLET.
TWO SUCTION OUTLETS (PLACED 3 OR MORE FEET APART)	YES	YES
THREE OR MORE OUTLETS	YES	YES

BACK-UP SYSTEMS (E.G., SVRS SYSTEMS)*	NA (NOT REQUIRED FOR DUAL DRAINS)	REQUIRED FOR SINGLE DRAINS NOT REQUIRED FOR DUAL DRAINS
	<p>* APSP OPPOSES MANDATING SVRS DEVICES ON MULTIPLE DRAIN POOLS BECAUSE TESTING AND RESEARCH CONFIRMS THAT WHILE SVRS DEVICES CAN HELP MITIGATE AT LEAST ONE FORM OF ENTRAPMENT INJURY IN A SINGLE OUTLET INSTALLATION, THEY DO NOT RELIABLY ACTIVATE WHEN THERE IS MORE THAN ONE SOURCE OF SUCTION, EVEN WHEN ONE OF THOSE SOURCES IS BLOCKED</p>	

CHART COMPLEMENTS OF APSP

FLORIDA DOH REGULATIONS FOR COMMERCIAL SWIMMING POOL CONSTRUCTION AND OPERATION.

WHEN BUILDING A COMMERCIAL POOL IN FLORIDA THE CONTRACTOR MUST ABIDE BY BOTH THE BUILDING CODE AND REGULATIONS ISSUED BY THE FLORIDA DEPARTMENT OF HEALTH. THE DOH MUST INSPECT THE POOL AND PASS IT BEFORE IT CAN BE OPENED FOR USE.

THESE RULES (64E-9) HAVE RECENTLY BEEN CHANGED WITH THE CHANGES GOING INTO EFFECT ON 5/24/2009. THE FOLLOWING INCLUDES SOME OF THOSE CHANGES THAT ARE MOST IMPORTANT IN THE VIEW OF THE AUTHOR OF THIS PROGRAM. THE COMPLETE RULES CAN BE FOUND ON THE FLORIDA DOH WEBSITE. CHANGES ARE IN RED.

DEFINITION CHANGES:

“COLLECTOR TANK” – A RESERVOIR, WITH A MINIMUM OF 2.25 SQUARE FEET WATER SURFACE AREA OPEN TO THE ATMOSPHERE, FROM WHICH THE RECIRCULATION OR FEATURE PUMP TAKES SUCTION, WHICH RECEIVES THE GRAVITY FLOW FROM THE MAIN DRAIN LINE, SURFACE OVERFLOW SYSTEM OR FEATURE WATER SOURCE LINE, AND THAT IS CLEANABLE.

“MARKING” OR “MARKINGS” – REFERS TO THE PLACEMENT AND INSTALLATION OF VISUAL MARKING CUES TO HELP

PATRONS IDENTIFY STEP, BENCH AND SWIMOUT OUTLINES, SLOPE BREAK LOCATION, DEPTH DESIGNATIONS, AND NO ENTRY AND NO DIVING WARNINGS. WHEN MARKINGS ARE SPECIFIED BY CODE TO BE DARK THE TERM DARK SHALL MEAN A MUNSELL COLOR VALUE FROM ZERO TO FOUR.

THE SECTION ON EXEMPTIONS HAS BEEN MODIFIED SIGNIFICANTLY AND INCLUDES ADDITIONAL REQUIREMENTS FOR VARIANCES.

OPERATIONAL REQUIREMENT CHANGES.

LANDSCAPE IRRIGATION WATER THAT WETS THE WET DECK AREA OF THE POOL, THE POOL ITSELF, COLLECTOR TANK OR AN INTERACTIVE WATER FEATURE MUST BE POTABLE WATER FROM A PUBLIC WATER SYSTEM.

CONSTRUCTION PLAN OR MODIFICATION PLAN APPROVAL

A LICENSED ENGINEER MUST PROVIDE CERTIFICATION FOR LIGHTING ON DECK AND SURFACE AREAS IF NIGHT SWIMMING IS PROPOSED.

NEW CROSS BRACED LADDER(S) SHALL BE INSTALLED IN PLACE OF NON-CROSS BRACED LADDER(S) IN CONFORMANCE WITH 64E-9.006(1)(d)1.DURING A POOL RE-SURFACING

CONSTRUCTION PLAN APPROVAL STANDARDS.

WITH THE EXCEPTION OF WATERLINE TILES (MUST BE 4 INCH): ONE INCH SQUARE TILE MAY BE USED THROUGHOUT THE REMAINDER OF THE POOL IF THE LICENSED CONTRACTOR PROVIDES A SIGNED WRITTEN CERTIFICATION TO THE APPROVING DEPARTMENT ENGINEER THAT THE ADHESIVE USED ON THE ONE INCH SQUARE TILE HAS A MANUFACTURER'S TESTED SHEER STRENGTH OF AT LEAST 250 PSI AND THE MANUFACTURER HAS SPECIFIED THE ADHESIVE FOR USE UNDERWATER TO ADHERE THE TYPE OF TILE USED (VITREOUS (GLASS) OR CERAMIC).

SIZING – THE BATHING LOAD FOR CONVENTIONAL SWIMMING POOLS, WADING POOLS, INTERACTIVE WATER FEATURES, WATER ACTIVITY POOLS LESS THAN 24” DEEP, AND SPECIAL PURPOSE POOLS SHALL BE COMPUTED ON THE BASIS OF ONE PERSON PER FIVE GALLONS PER MINUTE (GPM) OF RECIRCULATION FLOW.(ADDS WADING POOLS TO THIS REQUIREMENT)

POOLS WITH DEEP AREAS NOT AT ONE END OF THE POOL MUST HAVE AN ACCESS POINT AT THE DEEP PORTION.

THE TOP RUNG OF THE LADDER SHALL BE AT OR BELOW THE WATER LEVEL ON OPEN GUTTER POOLS AND NOT MORE THAN 12 INCHES BELOW THE DECK OR CURB TOP ON ALL OTHER TYPE POOLS.

WHERE THE GUTTER IS USED AS THE TOP STEP, THE TILE ON THE GUTTER FOR THE WIDTH OF THE STEPS SHALL BE SLIP RESISTANT. VINYL LINER AND FIBERGLASS POOLS MAY USE OTHER MATERIAL FOR THE STEP EDGE MARKING, PROVIDED THE MATERIAL IS PERMANENT, PERMANENTLY SECURED, DARK IN COLOR, NON-FADING, AND SLIP RESISTANT.

TEXTURED DECK FINISHES THAT PROVIDE PITTING AND CREVICES THAT ACCUMULATE SOIL ARE PROHIBITED. IF SETTLING OR WEATHERING OCCURS THAT WOULD CAUSE STANDING WATER, THE ORIGINAL SLOPES SHALL BE RESTORED.

POOL COPING SHALL NOT OVERHANG INTO THE POOL MORE THAN ONE AND A HALF INCHES.

POOLS WITH A LOAD OF LESS THAN 20 PERSONS MAY HAVE A SINGLE UNISEX BATHROOM.

ONE DIAPER CHANGING TABLES SHALL BE PROVIDED AT EACH RESTROOM. DIAPER CHANGING TABLES ARE NOT REQUIRED AT RESTROOMS WHERE ALL POOLS SERVED ARE RESTRICTED TO ADULT USE ONLY. SWIM DIAPERS ARE RECOMMENDED FOR USE BY CHILDREN THAT ARE NOT TOILET TRAINED. PERSONS THAT ARE ILL WITH DIARRHEA CANNOT ENTER THE POOL.

RECIRCULATION AND TREATMENT SYSTEM REQUIREMENTS.

THE BACK OF THE GUTTER DRAINS SHALL BE LOCATED WITHIN $3/4$ INCH OF THE BACK VERTICAL WALL OF THE GUTTER, WHERE THE GUTTER IS DEEPEST AND SHALL BE FLUSH WITH THE SURROUNDING AREA OR BE RECESSED NO MORE THAN $3/8$ INCH.

THIS RULE REQUIRES THAT ALL POOLS THAT DO NOT HAVE GRAVITY FEED DRAINS TO A COLLECTOR TANK MUST BE RETROFITTED BY THE FOLLOWING DATES.

(F) ALL POOLS BUILT WITHOUT A MAIN DRAIN COLLECTOR TANK MUST BE RETROFITTED WITH A PROPERLY SIZED AND PIPED COLLECTOR TANK ON OR BEFORE THE FOLLOWING DATES TO ELIMINATE DIRECT SUCTION THROUGH THE MAIN DRAIN.

1. FOR ALL POOLS, INCLUDING WADING POOLS, EXCEPT SPA TYPE POOLS, WITH A MAIN DRAIN GRATE WATER DEPTH OF 4 FEET OR LESS, CONSTRUCTION SHALL BE COMPLETED ON OR BEFORE ONE YEAR FROM THE EFFECTIVE DATE OF THIS RULE;

FOR ALL SPA TYPE POOLS BUILT BEFORE 1977, RETROFIT BY JULY 1, 2010,

FOR ALL SPA TYPE POOLS BUILT BETWEEN 1977 AND 1986, RETROFIT BY JULY 1, 2011,

FOR ALL SPA TYPE POOLS BUILT BETWEEN 1986 AND 1995, RETROFIT BY JULY 1, 2012

AND FOR ALL OTHER POOLS, RETROFIT BY JULY 1, 2013.

2. ALL EXISTING PUBLIC POOLS WITH DIRECT SUCTION MAIN DRAINS SHALL INSTALL AS SOON AS POSSIBLE, BUT IN NO CASE LATER THAN 120 DAYS AFTER THE EFFECTIVE DATE OF THIS RULE, A MAIN DRAIN COVER/GRATE THAT MEETS BOTH THE ASME/ANSI A112.19.8-2007 STANDARD FOR DRAIN COVERS AND THE WATER VELOCITY REQUIREMENT OF THIS RULE.

3. A MODIFICATION PERMIT SHALL BE OBTAINED PRIOR TO INSTALLATION OF THE COLLECTOR TANK.

4. POOLS THAT CANNOT BE RETROFITTED BY THESE DATES SHALL BE CLOSED ON OR BEFORE THESE DATES.

FEEDING CHLORINATED ISOCYANURATES DISINFECTANT IS PROHIBITED ON SPAS, WADING POOLS AND INTERACTIVE WATER FEATURES, AND THESE EXISTING FEEDERS SHALL BE REPLACED WITH NON-ISOCYANURATE CHLORINATORS,

OR EQUIVALENT, WITH A PH ADJUSTMENT FEEDER ON OR BEFORE JUNE 1, 2011. DUAL OR MULTIUSE FEEDERS CAN BE USED IF APPROVED FOR AND FEEDING AN ACCEPTABLE RATE OF ALTERNATE DISINFECTANT.

ULTRAVIOLET (UV) LIGHT DISINFECTANT EQUIPMENT MAY BE USED AS SUPPLEMENTAL WATER TREATMENT ON PUBLIC POOLS (AND ALTERNATIVE TREATMENT ON IWFS) SUBJECT TO THE CONDITIONS OF THIS PARAGRAPH AND MANUFACTURER'S SPECIFICATIONS. UV IS ENCOURAGED TO BE USED TO ELIMINATE CHLORINE RESISTANT PATHOGENS, ESPECIALLY THE PROTOZOAN CRYPTOSPORIDIUM.

1. UV EQUIPMENT AND ELECTRICAL COMPONENTS AND WIRING SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND THE MANUFACTURER SHALL PROVIDE A CERTIFICATION OF CONFORMANCE TO THE DEPARTMENT.
2. UV EQUIPMENT SHALL MEET UL STANDARDS AND SHALL BE ELECTRICALLY INTERLOCKED WITH RECIRCULATION PUMP(S) ON ALL POOLS AND WITH FEATURE PUMP(S) ON AN IWF.
3. UV EQUIPMENT SHALL BE VALIDATED BY A CAPABLE PARTY THAT IT DELIVERS THE REQUIRED AND PREDICTED UV DOSE AT THE VALIDATED FLOW, LAMP POWER AND WATER UV TRANSMITTANCE CONDITIONS, AND HAS COMPLIED WITH ALL PROFESSIONAL PRACTICES SUMMARIZED IN THE USEPA ULTRAVIOLET DISINFECTANT GUIDANCE MANUAL DATED NOVEMBER, 2006, EPA 815-R-06-007.
4. UV EQUIPMENT SHALL CONSTANTLY PRODUCE A VALIDATED DOSAGE OF AT LEAST 40 MJ/CM² (MILLIJOULES PER SQUARE CENTIMETER) AT THE END OF LAMP LIFE.

FOR NEW OR MODIFIED POOLS SUBMITTED FOR PLAN APPROVAL APPLICATION ON OR AFTER THE EFFECTIVE DATE OF THIS RULE, THEIR POSTED SIGN SHALL ADD: DO NOT SWALLOW THE POOL WATER.

VARIOUS CHANGES HAVE BEEN MADE TO DESIGN REGULATIONS FOR WADING POOLS, WAVE POOLS, SPA POOLS , ZERO DEPTH ENTRY POOLS, INTERACTIVE WATER FEATURES, WATER THEME PARKS AND BATHING PLACES. THESE CHANGES OFTEN REQUIRE THE ASSISTANCE OF PROFESSIONAL ENGINEERS AND ARE OUTSIDE OF THE PURPOSE OF THIS COURSE.

VIRGINIA GRAEME BAKER POOL AND SPA SAFETY ACT

POOL & SPA SAFETY ACT FAQs

(FREQUENTLY ASKED QUESTIONS)

GENERAL QUESTIONS

Q: WHAT ARE PUBLIC POOL AND SPA OWNERS/OPERATORS OBLIGATED TO DO TO COMPLY WITH THE VIRGINIA GRAEME BAKER POOL AND SPA SAFETY ACT (ACT)?

A: AS OF DECEMBER 19, 2008, ALL OPERATING PUBLIC POOLS AND SPAS MUST HAVE DRAIN COVERS THAT

MEET THE ANSI/ASME A112.19.8-2007 STANDARD ON EVERY DRAIN/GRATE. A LIST OF DRAIN COVER MANUFACTURERS CAN BE FOUND AT WWW.CPSC.GOV/WHATSNEW.HTML#POOL. IN ADDITION, IF THE POOL HAS A SINGLE MAIN DRAIN (OTHER THAN AN UNBLOCKABLE DRAIN), THE OPERATOR MUST EITHER DISABLE THE DRAIN OR INSTALL A SECOND ANTI-ENTRAPMENT DEVICE OR SYSTEM. THIS CAN TAKE THE FORM OF AN AUTOMATIC SHUTOFF SYSTEM, GRAVITY DRAINAGE SYSTEM, SAFETY VACUUM RELEASE SYSTEM (SVRS) OR SUCTION-LIMITING VENT SYSTEM. A POOL MAY HAVE MORE THAN ONE SINGLE MAIN DRAIN. IF A POOL HAS DUAL OR MULTIPLE MAIN DRAINS MORE THAN 3 FEET APART, IT MAY BE EXEMPT FROM THIS SECOND REQUIREMENT. POOLS AND SPAS WITH SINGLE MAIN DRAINS THAT ARE UNBLOCKABLE ARE ALSO EXEMPT FROM THIS REQUIREMENT. A LIST OF SVRS MANUFACTURERS CAN BE FOUND AT [HTTP://WWW.CPSC.GOV/BUSINFO/DRAINCMAN.HTML](http://WWW.CPSC.GOV/BUSINFO/DRAINCMAN.HTML). (JAN. 30, 2009)

Q: DO I NEED TO BE IN COMPLIANCE WITH THE ACT ON DECEMBER 19, 2008 IF I OPERATE A SEASONAL POOL OR SPA?

A: POOLS AND SPAS THAT ARE CLOSED ON DECEMBER 19, 2008 ARE NOT REQUIRED TO BE IN COMPLIANCE WITH THE ACT UNTIL THE DAY THE POOL OR SPA IS RE-OPENED TO THE PUBLIC. (JAN. 30, 2009)

Q: WHERE CAN I FIND CPSC'S INTERPRETATION OF THE LAW?

A: ON JUNE 18, 2008, CPSC STAFF ISSUED TECHNICAL AND LEGAL INTERPRETATIONS OF SECTION 1404 OF THE ACT, WHICH APPLIES TO PUBLIC POOLS AND SPAS. TO DOWNLOAD THIS DOCUMENT, PLEASE LOG ON TO: WWW.CPSC.GOV/BUSINFO/VGPSA.PDF (JAN. 30, 2009)

Q: ARE THERE ANY DISCUSSIONS TO RESCHEDULE OR EXTEND THE DECEMBER 19 DEADLINE?

A: THE DECEMBER 19, 2008, DEADLINE WAS ESTABLISHED BY CONGRESS AND HAS NOT BEEN AMENDED. CPSC LACKS AUTHORITY TO EXTEND THE DEADLINE SET BY CONGRESS. (JAN. 30, 2009)

Q: ARE EQUALIZER LINES IN PUBLIC POOLS COVERED IN THE ACT?

A: YES, SKIMMER EQUALIZER LINES ARE SUBMERGED DRAINS AND MUST EITHER BE COVERED (WITH AN ANSI/ASME A112.19.8-2007 COMPLIANT COVER) OR PLUGGED. EQUALIZER LINES ARE NOT CONSIDERED TO BE MAIN DRAINS BASED ON CPSC STAFF'S INTERPRETATION OF THE LAW. (JAN. 30, 2009)

Q: IF MY POOL HAS ONE MAIN DRAIN AND ONE OR MORE SKIMMERS, DOES IT NEED A SECOND ANTI-ENTRAPMENT DEVICE OR SYSTEM?

A: YES. CPSC STAFF CURRENTLY HAS NO TECHNICAL EVIDENCE TO SUPPORT CLAIMS THAT THIS TYPE OF SET-UP WOULD BE EQUIVALENT TO A MULTIPLE MAIN DRAIN SYSTEM. THEREFORE, UNLESS THE MAIN DRAIN IS UNBLOCKABLE, THIS TYPE OF SET-UP WOULD REQUIRE THE INSTALLATION OF A SECOND ANTI-ENTRAPMENT SYSTEM, AS OUTLINED IN CPSC'S STAFF INTERPRETATION. (JAN. 30, 2009)

Q: WHICH TYPES OF POOLS AND SPAS POSE THE GREATEST DANGER OF ENTRAPMENT AND EVISCERATION TO CONSUMERS?

A: CHILDREN'S WADING POOLS, OTHER POOLS DESIGNED SPECIFICALLY FOR YOUNG CHILDREN, AND IN-GROUND SPAS THAT HAVE FLAT DRAIN GRATES AND SINGLE MAIN DRAIN SYSTEMS. (JAN. 30, 2009)

Q: WHAT SHOULD I DO IF MY STATE OR COUNTY DEPARTMENT OF HEALTH DOES NOT ALLOW ME TO DISABLE MY DRAINS OR USE A PARTICULAR DRAIN COVER?

A: AFFECTED POOL AND SPA OWNERS/OPERATORS NEED TO BE IN COMPLIANCE WITH FEDERAL SAFETY REQUIREMENTS. IF YOU BELIEVE THAT STATE OR LOCAL LAWS MAKE IT IMPOSSIBLE FOR YOU TO COMPLY WITH FEDERAL LAW, PLEASE CONTACT SEAN WARD IN CPSC'S OFFICE OF THE GENERAL COUNSEL FOR GUIDANCE AT SWARD@CPSC.GOV. (JAN. 30, 2009)

DRAIN COVERS

Q: WHAT TYPES OF DRAIN COVERS ARE AVAILABLE FOR PURCHASE?

A: A VARIETY OF DRAIN COVERS HAVE ALREADY BEEN CERTIFIED TO ASME/ANSI A112.19.8-2007. THESE INCLUDE COVERS THAT ARE ROUND (FOR BLOCKABLE AND UNBLOCKABLE DRAINS), 9"X 9" SQUARE, 12"X 12" SQUARE, AND 18"X 18" SQUARE. CPSC STAFF EXPECTS ADDITIONAL SQUARE UNBLOCKABLE DRAIN COVERS TO ENTER THE MARKET IN 2009. TO VIEW A COMPLETE LISTING OF DRAIN COVER MANUFACTURERS WHO HAVE RECEIVED CERTIFICATION THAT THEIR PRODUCT MEETS THE ASME/ANSI STANDARD, LOG ON TO: WWW.CPSC.GOV/BUSINFO/DRAINCMAN.HTML.

(JAN. 30, 2009)

Q: WHAT IS THE PROPER MARKING ON APPROVED DRAIN COVERS?

A: DRAIN COVERS MADE DURING A SHORT PERIOD IN THE SUMMER OF 2008 USED THE ASME SYMBOL AND/OR THE "ASME/ANSI A112.19.8-2007" MARK. THERE WAS THEN A PERIOD OF TIME DURING THE LATE SUMMER AND EARLY FALL OF 2008 WHEN NO MARKING WAS PLACED ON DRAIN COVERS BEING MADE TO BE IN COMPLIANCE WITH THE STANDARD. SINCE NOVEMBER 12, 2008, NEWLY MADE DRAIN COVERS SHOULD

HAVE THE "VGB 2008" MARKING. YOU SHOULD ENSURE THAT YOU ARE USING CERTIFIED COVERS. IF THERE IS NO MARK OR YOU ARE OTHERWISE IN DOUBT, CONTACT THE MANUFACTURER AND ASK FOR A COPY OF THE CERTIFICATE. ALSO KEEP A RECORD OF WHERE AND EXACTLY WHEN YOU PURCHASED THE COVER. (JAN. 30, 2009)

Q: CAN OPERATORS PRE-ORDER APPROVED DRAIN COVERS?

A: YES. ROUND COVERS AND VARIOUS SQUARE COVERS ARE AVAILABLE FOR PURCHASE AND MANY MANUFACTURERS ARE TAKING ORDERS FOR DRAIN COVERS YET TO BE MANUFACTURED. (JAN. 30, 2009)

Q: WHAT SHOULD I DO IF MY POOL'S DRAIN REQUIRES A FIELD-FABRICATED DRAIN COVER BUT NONE IS AVAILABLE? (FOR EXAMPLE A POOL WITH A SINGLE L-SHAPED DRAIN THAT IS HALF ON THE POOL BOTTOM AND HALF ON THE WALL.)

A: CERTAIN DRAINS WILL REQUIRE A FIELD-FABRICATED COVER. POOL OWNERS/OPERATORS SHOULD EITHER WORK TO FIND A MANUFACTURER WHO WILL BUILD A CUSTOM-MADE COVER OR THE POOL SHOULD BE RE-BUILT TO HAVE DUAL MAIN DRAINS. IN THE NEAR TERM, OWNERS/OPERATORS SHOULD INCORPORATE ONE OF THE SECONDARY ANTI-ENTRAPMENT SYSTEMS INTO THEIR EXISTING SYSTEM. IF THE TWO PLANES OF THE L-SHAPED DRAIN CANNOT BE BLOCKED SIMULTANEOUSLY BY THE BODY BLOCKING ELEMENT DEFINED IN THE ASME STANDARD, THEN A SECONDARY SYSTEM IS NOT NECESSARY. FAILURE TO COMPLY WITH THE REQUIREMENTS OF THE ACT MAY RESULT IN POOL CLOSURE. (JAN. 30, 2009)

Q: WHO IS APPROVING NEW DRAIN COVER DESIGNS?

A: THIRD-PARTY TESTING AND CERTIFICATION IS BEING CONDUCTED BY UNDERWRITERS LABORATORIES, THE NATIONAL SANITATION FOUNDATION, AND IAPMO (THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS). (JAN. 30, 2009)

Q: I HAVE A FIELD-FABRICATED, UNBLOCKABLE DRAIN COVER THAT I BELIEVE MEETS THE CURRENT ASME/ANSI STANDARD. AM I REQUIRED TO ORDER A NEW COVER?

A: NO. A FIELD-FABRICATED COVER MAY CONTINUE TO BE USED WHERE A PROFESSIONAL ENGINEER (PE) CERTIFIES THAT IT MEETS THE REQUIREMENTS OF ASME/ANSI A112.19.8-2007, INCLUDING FLOW RATES, UV EXPOSURE, AND DURABILITY. THE PE MUST DOCUMENT THAT THE DRAIN COVER MEETS THE NEW STANDARD AND PROVIDE A COPY OF THE CERTIFICATE TO THE POOL OWNER/OPERATOR. (JAN. 30, 2009)

SUMPS

Q: WHAT IS CPSC'S POSITION REGARDING SUMPS AND THE ASME/ANSI STANDARD?

A: CPSC STAFF RECOGNIZES AND SUPPORTS THE TECHNICAL REQUIREMENT OF THE ASME/ANSI

A112.19.8-2007 STANDARD, WHICH CALLS FOR FIELD-BUILT SUMPS TO HAVE A DEPTH OF 1.5 TIMES THE DIAMETER OF THE PIPING; HOWEVER, THE FEDERAL POOL AND SPA SAFETY ACT DOES NOT REQUIRE POOL OWNERS/OPERATORS TO REPLACE THEIR SUMP. IF A NEW, COMPLIANT DRAIN COVER CAN BE SAFELY SECURED ONTO A PRE-EXISTING SUMP, WHILE PROPERLY CONTROLLING THE FLOW RATE, THEN IT MEETS THE INTENT OF THE LAW. IF A PE DETERMINES THAT ADDITIONAL ENGINEERING WORK NEEDS TO BE DONE TO THE SUMP TO BRING IT INTO COMPLIANCE WITH THE STANDARD AND ENSURE A SECURE CONNECTION WITH A NEW COVER, THEN THAT WORK SHOULD BE CARRIED OUT. FINALLY, IF A PE DETERMINES THAT A NEW DRAIN COVER CANNOT BE SAFELY PLACED ON A PRE-EXISTING SUMP, THEN THE SUMP SHOULD BE REMOVED AND REPLACED WITH A NEW, COMPLIANT SUMP THAT IS COMPATIBLE WITH THE COMPLIANT DRAIN COVERS. (JAN. 30, 2009)

COMPLIANCE

Q: MY PUBLIC SPA HAS THREE OR FOUR DRAIN COVERS, ALL IN A SMALL FOOT WELL. WHAT DO I NEED TO DO TO COMPLY?

A: THE DRAIN COVER REQUIREMENT OF THE NEW LAW APPLIES TO THESE TYPES OF PUBLIC SPAS. THEY SHOULD HAVE COMPLIANT DRAIN COVERS AND A SECOND ANTI-ENTRAPMENT SYSTEM IF THE DRAINS ARE LESS THAN 36 INCHES APART AND NOT LOCATED ON TWO PLANES. (JAN. 30, 2009)

Q: IF I HAVE A GRAVITY DRAIN SYSTEM, AM I REQUIRED TO CHANGE THE DRAIN COVER?

A: YES. POOLS WITH GRAVITY DRAIN SYSTEMS AUTOMATICALLY FALL INTO THE CATEGORY OF HAVING A SECOND ANTI-ENTRAPMENT SYSTEM, SO ENSURING THAT THE EXISTING COVERS ARE COMPLIANT WITH ASME/ANSI A112.19.8-2007 OR REPLACING THEM WITH COMPLIANT COVERS IS ALL THAT IS REQUIRED. (JAN. 30, 2009)

Q: A POOL OWNER INSTALLED AN EMERGENCY SHUT-OFF SWITCH FOR AN INDOOR POOL WHICH IS GRAVITY FED. THE EXISTING COVERS ARE 18"x 18" WITH A 24" DIAGONAL. WOULD NEW DRAIN COVERS WITH THE NEW LOGO BE REQUIRED?

A: DRAIN COVERS COMPLIANT WITH ASME/ANSI 112.19.8-2007 ARE REQUIRED ON ALL DRAINS OF PUBLIC POOLS AND SPAS. IF THE DRAIN ON A SINGLE MAIN DRAIN IS BLOCKABLE, A SECONDARY ANTI-ENTRAPMENT SYSTEM MUST ALSO BE INSTALLED. AN 18"x 18" GRATE WITH A 24" DIAGONAL IS BLOCKABLE BY THE BODYBLOCKING ELEMENT REFERRED TO IN THE ASME STANDARD. AN EMERGENCY SHUT-OFF SWITCH MUST BE

AUTOMATIC TO BE IN COMPLIANCE WITH THE REQUIREMENTS FOR THE SECONDARY ANTI-ENTRAPMENT DEVICE. IF THE POOL HAS A MULTIPLE SUCTION OUTLET SYSTEM, THEN ENSURING THAT THE EXISTING DRAIN COVERS ARE COMPLIANT WITH ASME/ANSI A112.19.8-2007 OR REPLACING THEM WITH COMPLIANT DRAIN COVERS IS ALL THAT IS REQUIRED. (JAN. 30, 2009)

Q: MY INDOOR POOL HAS TWO MAIN DRAINS ABOUT 8 INCHES APART. DO I STILL NEED TO INSTALL NEW DRAIN COVERS?

A: YES. THE DRAIN COVERS MUST BE COMPLIANT WITH ASME/ANSI A112.19.8-2007. IN ADDITION, YOU WILL NEED A SECOND ANTI-ENTRAPMENT SYSTEM SINCE THE DRAINS ARE LESS THAN 36 INCHES APART. (JAN. 30, 2009)

Q: WHO QUALIFIES AS A "TRAINED OR CERTIFIED PROFESSIONAL"?

A: CPSC STAFF RECOMMENDS CONTACTING STATE OR LOCAL OFFICIALS TO DETERMINE WHO IS QUALIFIED IN YOUR AREA. EXPERTS, SUCH AS A PE OR SIMILAR DESIGN PROFESSIONAL, SHOULD BE FORMALLY LICENSED OR CERTIFIED AS A BUSINESS AND CARRY SOME LEVEL OF INSURANCE OR SIMILAR PROTECTION. (JAN. 30, 2009)

Q: ARE SINGLE FAMILY RENTAL PROPERTY POOLS CONSIDERED TO BE PUBLIC UNDER THE ACT?

A: NO, THESE POOLS ARE NOT CONSIDERED PUBLIC UNDER SECTION 1404(c)(2) OF THE ACT AND THEREFORE ARE NOT REQUIRED TO COMPLY WITH THE COVER REPLACEMENT OR SECONDARY ANTI-ENTRAPMENT SYSTEM REQUIREMENTS. (JAN. 30, 2009)

Q: ARE PHYSICAL THERAPY POOLS CONSIDERED TO BE PUBLIC UNDER THE ACT?

A: IT DEPENDS. THERAPY POOLS ARE NOT SPECIFICALLY DEFINED UNDER SECTION 1404(c)(2) OF THE ACT, BUT A THERAPY POOL MAY NOT BE CONSIDERED A PUBLIC POOL DEPENDING ON ITS ACCESSIBILITY TO THE PUBLIC GENERALLY. (JAN. 30, 2009)

Q: APPROVED FLOW RATES ARE DETERMINED BY THE DRAIN COVER MANUFACTURERS, BUT SOME STATE MINIMUM STANDARDS REQUIRE THAT THE WATER VELOCITY THROUGH GRATES NOT EXCEED 1.5 FPS WITH ONE DRAIN 100% BLOCKED. HOW DO WE RECTIFY THIS ISSUE?

A: DRAIN COVER RATINGS ARE BASED ON ALLOWABLE FLOW IN GALLONS PER MINUTE (GPM) AND TESTED IN THE LABORATORY UNDER CONDITIONS TO DETERMINE MAXIMUM ALLOWABLE FLOW RATE, WHICH CAN RESULT IN

VELOCITIES THROUGH THE OPEN AREA OF THE COVER THAT ARE GREATER THAN 1.5 FPS. ALIGNMENT OF THE FLOW RATINGS

OF THE COVERS WITH STATE REQUIREMENTS MAY REQUIRE ADJUSTMENTS TO SOME OF THE STATE CODES.

STATE OFFICIALS MAY WANT TO EVALUATE THEIR CODE REQUIREMENTS IN LIGHT OF THE NEW REQUIREMENTS MADE MANDATORY BY THE ACT. (JAN. 30, 2009)

Q: WHO CAN ENFORCE THE ACT?

A: BOTH THE CONSUMER PRODUCT SAFETY COMMISSION AND THE STATE ATTORNEYS GENERAL ARE EMPOWERED TO ENFORCE THIS ACT.