

2026 FIRST DISTRICT HEALTH UNIT AQUATIC VENUE SEMINAR

FIRST DISTRICT HEALTH UNIT
ENVIRONMENTAL HEALTH
DIVISION

FDHU AQUATIC FACILITY RULES AND REGULATIONS

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ENVIRONMENTAL HEALTH DIVISION

WHY REGULATE AQUATIC VENUES?

- ACCORDING TO THE CDC, NEARLY 50,000 PEOPLE VISIT EMERGENCY DEPARTMENTS EACH YEAR IN THE US DUE TO SWIMMING POOL AND AQUATIC FACILITY ACCIDENTS.
- MORE THAN 4000 PEOPLE DIE FROM UNINTENTIONAL DROWNING IN THE US EACH YEAR.
 - BETWEEN 350 AND 700 ARE SPECIFICALLY AT POOLS OR SPAS.
 - ABOUT 6500 PEOPLE TREATED IN EMERGENCY ROOMS FOR NON-FATAL DROWNINGS.
 - DROWNING IS THE #1 CAUSE OF DEATH FOR CHILDREN AGES 1-4.
- AROUND 1.13 MILLION CASES OF RECREATIONAL WATER ILLNESS EACH YEAR IN THE US.
- THIS SESSION WILL COVER REGULATIONS IN THE FIRST DISTRICT HEALTH UNIT.

FIRST DISTRICT HEALTH UNIT

- COMPRISED OF 7 COUNTIES: BOTTINEAU, BURKE, MCHENRY, MCLEAN, RENVILLE, SHERIDAN AND WARD
- GOVERNED BY THE BOARD OF HEALTH
- RULES AND REGULATIONS PROMULGATED BY THE BOARD OF HEALTH TO PROTECT THE HEALTH AND SAFETY OF THE PUBLIC

RULE AND REGULATION NO. 12

- ADOPTED IN 1995.
- REGULATES THE INSPECTION, OPERATION AND MONITORING REQUIREMENTS OF PUBLIC AND SEMI-PUBLIC AQUATIC FACILITIES WITHIN THE FDHU.

FDHU AQUATIC VENUE RULES AND REGULATIONS

- REVISED IN 2024.
- EFFECTIVE STARTING JANUARY 1, 2025.
- COVERS DESIGN PARAMETERS AND REQUIREMENTS FOR AQUATIC FACILITIES AND AQUATIC VENUES.
- COVERS OPERATIONAL REQUIREMENTS.

THESE REGULATIONS ONLY APPLY TO AQUATIC FACILITIES LOCATED IN THE FDHU

- THIS PRESENTATION COVERS HIGHLIGHTS. DOES NOT DETAIL EVERY REQUIREMENT IN THE CODE.
- EVERY AQUATIC FACILITY SHALL HAVE A COPY OF THE CODE AVAILABLE.
- THE CODE SHALL SERVE AS A REFERENCE AND TOOL FOR OPERATING AN AQUATIC FACILITY.

SECTION 1: GENERAL INTENT

- EXPLANATION OF RULE AND REGULATION 12.
 - SECTION 1: INSPECTION AND REGULATIONS
 - SECTION 2: WATER SAMPLES
 - SECTION 3: AQUATIC FACILITIES MAY BE CLOSED IF THEY ARE A HAZARD
- “HOUSEKEEPING” TYPE INFORMATION (EX. TEMPS IN THE CODE ARE IN FAHRENHEIT).

SECTION 2: DEFINITIONS

- “APPROVED”
- “AQUATIC FACILITY”
- “AQUATIC VENUE”
- “QUALIFIED OPERATOR”
- “RESPONSIBLE SUPERVISOR”

SECTION 3: LICENSURE

- NO AQUATIC FACILITY MAY OPERATE WITHOUT A LICENSE ISSUED BY FDHU.
- NON-TRANSFERABLE.
- MAY BE REVOKED OR SUSPENDED AT ANY TIME FOR CAUSE.
- PERIODS OF NON-OPERATION.
 - 30 DAYS- SUSPENSION
 - 60 DAYS- REVOCATION
- MUST BE POSTED IN A CONSPICUOUS LOCATION, EASILY VISIBLE TO PATRONS AT THE ENTRANCE TO THE FACILITY.

SECTION 4: INSPECTIONS

- THE DEPARTMENT SHALL CONDUCT INSPECTIONS (INCLUDES INVESTIGATIONS).
- AT LEAST YEARLY.
- INSPECTION MAY NOT BE REFUSED.
- REFUSAL OF, INTERFERING WITH, DELAYING OR PROVIDING FALSE INFORMATION DURING AN INSPECTION SHALL RESULT IN LICENSE SUSPENSION OR REVOCATION.

SECTION 5: CONSTRUCTION AND UTILITIES

- THIS SECTION CONTAINS STANDARDS FOR CONSTRUCTION AND MODIFICATION OF AQUATIC FACILITIES.
- FACILITIES SHALL BE IN COMPLIANCE WITH ELECTRICAL, PLUMBING, BUILDING, MECHANICAL AND FIRE CODES.

SECTION 6: MANAGEMENT AND PERSONNEL

- QUALIFIED OPERATORS.
- RESPONSIBLE SUPERVISORS.
- SAFETY TEAM.
- LIFEGUARDS.
- LIFEGUARD MANAGER.
- LIFEGUARD SUPERVISOR.
- EMPLOYEE HEALTH.

QUALIFIED OPERATORS

- MUST DIRECTLY OVERSEE OPERATIONS AND TRAINING.
- SHALL EITHER BE PRESENT OR AVAILABLE WITHIN 2 HOURS.
- MUST HAVE A COPY OF THEIR CERTIFICATION ON HAND AND PROVIDE A COPY TO FDHU.
- RESPONSIBLE FOR TRAINING ANY STAFF THAT DOES CHEMISTRY TESTING OR COLLECTS WATER SAMPLES (ANNUALLY AT A MINIMUM).

QUALIFIED OPERATOR

- MANDATORY TRAINING
- IF YOU ARE A QUALIFIED OPERATOR (CPO):
 - MUST SEND A COPY OF YOUR CERTIFICATE TO FDHU.
 - jcalavera@nd.gov

RESPONSIBLE SUPERVISOR

- IF THE QUALIFIED OPERATOR IS NOT ONSITE, THERE MUST BE A RESPONSIBLE SUPERVISOR.
- THEY MUST:
 - UNDERSTAND WATER TESTING AND RECORDING REQUIREMENTS,
 - KNOW HOW TO MAKE ADJUSTMENTS TO WATER QUALITY,
 - KNOW GENERAL MAINTENANCE PROCEDURES,
 - KNOW THE CRITERIA THAT MANDATE CLOSURE, AND
 - BE ABLE TO CONTACT THE QUALIFIED OPERATOR.

SAFETY TEAM

- REQUIRED AT ALL AQUATIC FACILITIES.
- DUTIES:
 - ENFORCING THE RULES OF THE FACILITY,
 - RESPONDING TO EMERGENCIES,
 - IDENTIFYING HEALTH AND SAFETY HAZARDS, AND THEN MITIGATING THEM,
 - BE FAMILIAR WITH FACILITY PPE AND ENSURING USE WHEN REQUIRED,
 - CONDUCTING AND RECORDING/LOGGING SAFETY AND PREVENTIVE MAINTENANCE INSPECTIONS, AND
 - INTERFACING WITH FDHU REGARDING CODE REQUIREMENTS.

LIFEGUARDS

- IF REQUIRED, SHALL BE PRESENT IN ENOUGH NUMBERS TO MEET THE PROVISIONS OF THE SAFETY PLAN.
- REQUIRED AT:
 - PUBLIC AQUATIC VENUES,
 - SEMI-PUBLIC VENUES WITH $>2000 \text{ FT}^2$ OF SURFACE AREA, OR A COMBINED SURFACE AREA THAT IS $>2000 \text{ FT}^2$,
 - NEW POOLS WITH DEPTHS $>5 \text{ FT}$,
 - VENUES THAT ALLOW UNSUPERVISED CHILDREN UNDER 14 YEARS OF AGE, OR ANY VENUE USED FOR THE RECREATION OF YOUTH GROUPS,
 - VENUES USED FOR GROUP TRAINING (COMPETITIVE SWIMMING/SPORTS, LIFEGUARD TRAINING, EXERCISE PROGRAMS, SWIMMING LESSONS),
 - VENUES WITH CURRENT OR WAVE ACTION (LAZY RIVERS, WAVE POOLS),
 - WATERSLIDE LANDING POOLS,
 - ANY VENUE WHERE PATRONS ENTER THE WATER FROM ANY HEIGHT ABOVE THE DECK (DIVING BOARDS, SLIDES, DIVING PLATFORMS, CLIMBING WALLS), AND
 - ANY VENUE WHERE ALCOHOL IS SOLD/SERVED/ALLOWED TO BE CONSUMED.

LIFEGUARD MANAGER

- MUST DIRECTLY SUPERVISE ALL LIFEGUARDS.
- MUST BE A QUALIFIED LIFEGUARD.
- MAKES ALL DECISIONS REGARDING NUMBER OF AND DISPOSITION OF ALL LIFEGUARDS ON DUTY DURING HOURS A FACILITY IS OPEN TO PATRONS.

LIFEGUARDS

- MUST ACHIEVE AND MAINTAIN CERTIFICATION CRITERIA.
- MUST BE UNDER THE DIRECT SUPERVISION OF A LIFEGUARD MANAGER.
- IF TWO OR MORE LIFEGUARDS ARE REQUIRED TO SATISFY ZONE RESPONSIBILITIES AS PER THE SAFETY PLAN, THEN AN ADDITIONAL LIFEGUARD MUST BE PRESENT TO SERVE AS THE LIFEGUARD SUPERVISOR.

LIFEGUARD SUPERVISOR

- SUPERVISOR DUTIES MAY NOT INTERFERE WITH PATRON SURVEILLANCE.
- DUTIES INCLUDE:
 - MONITORING THE PERFORMANCE OF LIFEGUARDS IN THEIR ZONES,
 - MAKE SURE ROTATIONS ARE CONDUCTED IN COMPLIANCE WITH THE SAFETY PLAN,
 - COORDINATE STAFF RESPONSE AND PATRON CARE DURING AN EMERGENCY,
 - IDENTIFYING HAZARDS AND COMMUNICATING TO STAFF AND MANAGEMENT TO MITIGATE THEM, AND
 - MAKE SURE REQUIRED SAFETY RELATED EQUIPMENT IS IN PLACE AND IN GOOD CONDITION.

LIFEGUARD DUTIES

- MONITORING PATRONS IN THEIR ZONE OF SURVEILLANCE.
- ENFORCING FACILITY RULES.
- RESPONDING TO EMERGENCIES.
- IDENTIFYING HAZARDS AND TAKING ACTION TO MITIGATE THE HAZARD.
- MAINTAINING SKILLS AT A TEST-READY PROFICIENCY.
- WEARING AN IDENTIFYING UNIFORM.
- WEARING NECESSARY EYEWEAR.
- PROTECTING THEMSELVES FROM UV LIGHT WHEN APPLICABLE.
- KNOWING THE LOCATION OF PPE AND WHEN IT IS REQUIRED.

EMPLOYEE HEALTH

- OPEN WOUNDS: MAY ONLY ENTER WATER OR LIFEGUARD IF THEY HAVE APPROVAL FROM A HEALTH CARE PROVIDER OR WEAR A WATERPROOF, OCCLUSIVE BANDAGE TO COVER THE WOUND.
- EMPLOYEES ILL WITH DIARRHEA OR VOMITING: MAY NOT ENTER OR CONTACT WATER OR SERVE AS A LIFEGUARD UNTIL 24 HOURS AFTER SYMPTOMS HAVE STOPPED.

SECTION 7: POLICIES, PROCEDURES, AND RECORD KEEPING

- THE DUTIES OF THE LICENSE HOLDER.
- CLOSURE/REOPENING.
- PLANS/PROCEDURES.
- CONTAMINATION RESPONSE.
- WATER SAMPLE COLLECTION.
- WATER PARAMETER TESTING.
- DAILY LOG.
- OTHER ITEMS/RECORDS.

LICENSE HOLDER DUTIES

- IN ORDER TO HAVE AND CONTINUE TO HAVE A LICENSE, A LICENSE HOLDER MUST CARRY OUT CERTAIN ACTIONS.
- FAILURE TO CARRY OUT THOSE ACTIONS MAY RESULT IN SUSPENSION OR REVOCATION OF THE LICENSE.

LICENSE HOLDER DUTIES

- POST THE LICENSE.
- COMPLY WITH ALL CODE PROVISIONS.
- ALLOW THE DEPARTMENT ACCESS TO THE FACILITY.
- REPLACE EQUIPMENT TO COMPLY WITH THE CODE.
- COMPLY WITH DEPARTMENT DIRECTIVES INCLUDING TIME FRAMES FOR CORRECTIVE ACTIONS.
- ACCEPT NOTICES ISSUED BY THE DEPARTMENT.
- NOTIFY CUSTOMERS THAT A COPY OF THE MOST RECENT INSPECTION IS AVAILABLE UPON REQUEST.
- ENSURE THAT THE FACILITY IS OPERATING IN COMPLIANCE WITH MANDATED POLICIES AND PROCEDURES.
- ENSURE THE FACILITY HAS A SAFETY TEAM.
- PLACE AND MAINTAIN ALL MANDATED SIGNAGE AND PLACARDS.

CLOSURE

- LICENSE HOLDER INITIATED.
- DEPARTMENT INITIATED.

CLOSURE: LICENSE HOLDER INITIATED

- IMMINENT HEALTH HAZARDS EXIST BECAUSE OF AN EMERGENCY SUCH AS FIRE, FLOOD, INTERRUPTION OF ELECTRICAL OR WATER SERVICE, SEWAGE BACKUP OR SEWER FAILURE, MISUSE OF CHEMICALS, OUTBREAK OF RWI, GROSS INSANITARY OCCURRENCE OR CONDITION, ANY CONDITION DETAILED IN THE NEXT SLIDES, OR ANY OTHER CIRCUMSTANCE THAT ENDANGERS PUBLIC HEALTH.
- MUST NOTIFY THE DEPARTMENT.
- MAY NOT RESUME OPERATIONS UNTIL PERMISSION TO DO SO IS GRANTED BY THE DEPARTMENT.

CLOSURE: DEPARTMENT INITIATED

- FAILURE TO HAVE REQUIRED SUPERVISION AND STAFFING.
- TOO LOW OF A DISINFECTION RESIDUAL.
- FAILURE TO RUN THE CIRCULATION SYSTEM CONTINUOUSLY.
- pH OUTSIDE ACCEPTABLE RANGE/TESTING AT MAX/MIN VALUES OF TEST EQUIPMENT.
- NON-APPROVED SOURCE WATER.
- NON-GFCI RECEPTACLES WITHIN 20 FEET OF AQUATIC VENUE.
- ABSENCE OF LIFESAVING EQUIPMENT.

CLOSURE: DEPARTMENT INITIATED

- AQUATIC VENUE BOTTOM NOT VISIBLE.
- FAILURE TO HAVE AN ENCLOSURE.
- USE OF UNAPPROVED CHEMICALS OR APPLICATION BY UNAPPROVED METHODS.
- BROKEN/MISSING/DAMAGED SUBMERGED SUCTION OUTLET GRATES.
- EXCEEDING PEAK OCCUPANCY.
- BROKEN GLASS/SHARP OBJECTS IN AQUATIC VENUE/ON DECK.
- ANY OTHER ITEM DETERMINED BY DEPARTMENT TO BE HEALTH HAZARD.

CLOSURE: WHAT IS CLOSED?

- IF AN AQUATIC VENUE IS CLOSED (TAKEN OUT OF SERVICE): WATER MUST EITHER BE RECIRCULATED AND TREATED OR VENUE MUST BE COMPLETELY DRAINED.
- VENUE HAS AN ENCLOSURE OR DOES NOT HAVE AND ENCLOSURE.
- IF A VENUE HAS AN ENCLOSURE: EITHER THE ACCESS IS RESTRICTED TO ONLY STAFF OF THE FACILITY BY EXCLUDING PATRONS FROM THE ENCLOSED AREA OR THE VENUE MUST HAVE AN APPROVED SAFETY COVER INSTALLED.

CLOSURE: WHAT IS CLOSED?

- IF A VENUE DOES NOT HAVE AN ENCLOSURE, AND OTHER VENUES STAY OPEN, THEN ONE OF THE FOLLOWING MUST BE DONE:
 - STAFF SHALL BE PRESENT AND SHALL KEEP PATRONS OUT OF THE VENUE,
 - AN APPROVED TEMPORARY BARRIER SHALL BE INSTALLED TO KEEP PATRONS OUT AND THE BARRIER SHALL BE REGULARLY CHECKED TO ENSURE INTEGRITY, OR
 - AN APPROVED SAFETY COVER SHALL BE INSTALLED.
 - IF NONE OF THE ABOVE CAN BE ACHIEVED FOR AN INDIVIDUAL VENUE THAT NEEDS TO BE CLOSED, THEN ACCESS TO THE ENTIRE FACILITY SHALL BE RESTRICTED TO ONLY STAFF OF THE FACILITY BY EXCLUDING PATRONS FROM THE ENTIRE FACILITY.
- IF A VENUE DOES NOT HAVE AN ENCLOSURE, AND ALL OTHER VENUES ARE ALSO CLOSED, THEN ONE OF THE FOLLOWING MUST BE DONE:
 - AN APPROVED SAFETY COVER SHALL BE INSTALLED.
 - ACCESS TO THE AQUATIC VENUE SHALL BE RESTRICTED TO ONLY STAFF OF THE FACILITY BY EXCLUDING PATRONS FROM THE ENTIRE FACILITY.

REOPENING

- IF AN AQUATIC VENUE IS CLOSED BY THE DEPARTMENT, MAY NOT BE PUT BACK INTO SERVICE WITHOUT APPROVAL FROM THE DEPARTMENT.
- IF AN AQUATIC VENUE IS CLOSE DUE TO FAILURE OF A MICROBIOLOGICAL SAMPLE, IT MAY NOT BE PLACED BACK INTO SERVICE UNTIL A PASSING MICROBIOLOGICAL SAMPLE IS ACHIEVED AND PERMISSION IS GIVEN BY THE DEPARTMENT.
- IN ANY CASE, AN AQUATIC VENUE MAY NOT BE PLACED BACK INTO SERVICE UNTIL ALL CONDITIONS ARE IN COMPLIANCE WITH THE CODE.

REQUIRED PLANS

- OPERATIONS
- SAFETY
- COMMUNICATION
- AIR QUALITY OPERATIONS
- FECAL/VOMIT/BLOOD
CONTAMINATION RESPONSE
- TRAINING
- ACCIDENTAL CHEMICAL
RELEASE
- INCLEMENT WEATHER
- EVACUATION

CONTAMINATION RESPONSE

- MUST HAVE A FECAL/VOMIT/BLOOD CONTAMINATION RESPONSE PLAN.
- PROCEDURES FOR DISINFECTION OF WATER AFTER CONTAMINATION.
- HAVE A CONTAMINATION RESPONSE LOG DOCUMENTING ANY FECAL/VOMIT/BLOOD CONTAMINATION EVENTS.
- PROCEDURES FOR REMEDIATION OF AND TESTING FOR SUSPECTED LEGIONELLA CONTAMINATION.
- PROCEDURES FOR SURFACE CONTAMINATION CLEANING AND DISINFECTION.

WATER SAMPLE COLLECTION

- FROM THE BULK WATER FOR ANY VENUE.
- AT LEAST 18 INCHES BELOW SURFACE.
- IF AVAILABLE, AT LEAST 3-4 FEET IN DEPTH.
- BETWEEN INLETS.
- ROTATE SITES AROUND PERIMETER OF VENUE FOR MULTIPLE SAMPLE COLLECTION IN ANY 24 HOUR PERIOD.
- SAMPLES MUST BE TESTED IMMEDIATELY.
- MICROBIOLOGICAL SAMPLES COLLECTED IN MIDDLE OF OPERATING DAY.

WATER CHEMISTRY TESTING

- DAILY

- DISINFECTION RESIDUAL (FREE AND COMBINED FOR CHLORINE):
RECORD ORP READING EACH TIME THIS IS TESTED. ALSO RECORD
TEMP FOR HEATED VENUES.
- pH.
- CYANURIC ACID- ONCE DAILY.

- WEEKLY

- ALKALINITY.
- SALT LEVELS (IN LINE CHLORINATORS).

- MONTHLY

- CALCIUM HARDNESS.
- CALCULATE THE SATURATION INDEX.

- QUARTERLY

- TDS.

DAILY LOG

- DATES, TIMES, INITIALS OF TESTER, RESULTS FOR ALL TESTING DONE.
- COPY OF LAB RESULTS FOR ALL MICROBIOLOGICAL TESTING DONE.
- READING FROM THE RATE OF FLOW GAUGE.
- RECORDS FOR ALL EQUIPMENT CALIBRATION AND FILTER MAINTENANCE OR UPKEEP.
- RECORD OF ALL SERIOUS INJURIES AND ILLNESS INCIDENTS.

DAILY LOG

- RESULTS OF MONTHLY TESTING OF THE CHEMICAL INTERLOCK SYSTEM.
- RESULTS OF DAILY EVALUATION OF CHEMICAL TUBING AND CONNECTIONS.
- DOCUMENTATION OF MALFUNCTIONING EQUIPMENT, EQUIPMENT FAILURE, POWER OUTAGES OR EQUIPMENT ERRORS.
- DOCUMENTATION OF INTERRUPTION OF CIRCULATION, FILTRATION, OR DISINFECTION SYSTEMS FOR MORE THAN ONE HOUR.
- DAILY ATTENDANCE.
- NAME OF PERSON PERFORMING MANDATED DAILY INSPECTION.
- DAILY LOG MAINTAINED ON SITE AND AVAILABLE FOR REVIEW FOR AT LEAST THREE YEARS.

DAILY INSPECTION

- QUALIFIED OPERATOR OR RESPONSIBLE SUPERVISOR.
- MUST BE DONE DAILY PRIOR TO OPENING.
- LIST OF 21 MANDATORY ITEMS.

CHEMICALS

- ALL PPE INDICATED ON CHEMICAL LABELS SHALL BE KEPT ON HAND IN ALL NECESSARY SIZES AND STORED SO AS TO BE AVAILABLE TO EMPLOYEES.
- MANUAL CHEMICAL ADDITION.
 - ONLY BY QUALIFIED OPERATOR OR RESPONSIBLE SUPERVISOR.
 - MAY ONLY BE DONE WHEN VENUE IS OUT OF SERVICE.
- CHEMICAL MEASURING DEVICES.
 - APPROPRIATE TO CHEMICAL BEING MEASURED.
 - DEDICATED TO ONLY ONE CHEMICAL.
- CHEMICAL INVENTORY LOG.
 - CREATED AND MAINTAINED BY QUALIFIED OPERATOR.
 - MUST REFLECT ACTUAL CONDITIONS IN THE FACILITY.

SDS

- CLEARLY LABELED BINDERS IN EACH LOCATION CHEMICALS ARE LOCATED.
- ALPHABATIZED BY COMMON NAME/WORKING NAME FOR CHEMICAL.
- IF CHEMICALS ARE NO LONGER KEPT OR USED, SDS FOR THEM SHALL NOT BE IN THE WORKING BINDERS.

PATRONS

- REQUIRED TO TAKE A CLEANSING SHOWER BEFORE ENTERING WATER.
- SWIM DIAPERS REQUIRED FOR ALL INCONTINENT INDIVIDUALS.
- MAY NOT EAT OR DRINK IN AQUATIC VENUES OR ON PERIMETER DECK.
- NO GLASS FOOD OR BEVERAGE CONTAINERS ALLOWED.

ANIMALS

- ALL DOMESTIC ANIMALS ARE TO BE EXCLUDED FROM THE WATER OF ANY AQUATIC VENUE.
- STEPS MUST BE TAKEN TO REASONABLY EXCLUDE WILD ANIMALS.
- PEST CONTROL PLAN.
- ENTIRE AQUATIC FACILITY SHALL BE KEPT FREE OF RODENTS AND VERMIN.

DIAPER CHANGING

- DIAPER CHANGING STATIONS WITH ACCESS TO HAND SINKS MUST BE ACCESSIBLE FOR ALL PATRONS.
- NO DIAPER CHANGING ON DECK OR IN ANY AQUATIC VENUE.

SECTION 8: WATER QUALITY, TREATMENT, FILTRATION AND CIRCULATION

- PARAMETERS.
- TESTING EQUIPMENT.
- ALLOWED CHEMICALS.
- UV LIGHT.
- SUPERCHLORINATION.

WATER QUALITY PARAMETERS

- IF WATER IS PRESENT IN ANY AQUATIC VENUE, WATER QUALITY PARAMETERS HAVE TO BE MET.
- WATER MUST BE OF SUFFICIENT CLARITY THAT THE BOTTOM IS VISIBLE AT ALL TIMES.
 - REFERENCE TILES VISIBLE, OR
 - MAIN DRAIN OR STANDARD TEST DISK IN DEEPEST AREA ARE READILY VISIBLE FROM DECK.
- WATER SHALL BE MAINTAINED AT THE LEVEL SPECIFIED IN THE ORIGINAL DESIGN.
- HEATED VENUES: MAY NOT BE WARMER THAN 104 DEGREES.

DAILY DISCHARGE WATER

- 4 GALLONS PER BATHER
PER DAY.
- DISCHARGED TO WASTE.
- REQUIRED VOLUME MAY
INCLUDE FILTER
BACKWASH WATER.

MICROBIOLOGICAL TESTING

- MUST HAVE A PASSING MICROBIOLOGICAL TEST FOR EACH AQUATIC VENUE FOR EACH MONTH OR FRACTION OF THAT IT IS OPEN.
- FAILURE TO TEST RESULTS IN SUSPENSION OF THE LICENSE FOR THE AQUATIC FACILITY.
- TODAY'S LAST SESSION WILL COVER MICROBIOLOGICAL TESTING IN MORE DETAIL.

WATER CHEMISTRY PARAMETER TESTING

- **MUST HAVE A TEST KIT CAPABLE OF TESTING DISINFECTION CHEMICALS, pH, CALCIUM HARDNESS, ALKALINITY, CYANURIC ACID (IF APPLICABLE), SALT (IF APPLICABLE, AND/OR ANY OTHER CHEMICAL USED FOR WHICH THE MANUFACTURER SPECIFIES A MEASURABLE RANGE IN AQUATIC VENUE WATER.**
- **THE TESTING RANGE FOR EACH ITEM SHALL AT A MINIMUM ENCOMPASS THE ENTIRETY OF VALUES SPECIFIED IN THE CODE AND/OR IN ANY MANUFACTURER'S LABELING.**
- **THE GRADATIONS OF THE TESTING EQUIPMENT MUST BE SMALL ENOUGH TO MEASURE ACCURATE LEVELS THROUGHOUT THE RANGE OF USE.**

WATER CHEMISTRY PARAMETER TESTING

- FREE AND TOTAL CHLORINE RESIDUALS MUST BE TESTABLE IN THE RANGE OF 0-11 PPM AT A MINIMUM.
- FREE AND TOTAL CHLORINE RESIDUALS MUST BE ABLE TO BE TESTED IN STEPS NO LARGER THAN .2 PPM.
- pH READINGS SHALL BE IN STEPS NO LARGER THAN .2 AND THE TEST METHOD SHALL HAVE A RANGE OF AT LEAST 6.8-8.0.
- ANY OTHER TESTS SHALL HAVE INCREMENTS SUCH THAT RESULTS OBTAINED ARE SUFFICIENT TO MAINTAIN WATER CHEMISTRY.

TEST KITS

- STORE IN A CLEAN, DRY LOCATION IN THE DARK.
- ROOM TEMPERATURE IS BEST. PROTECT FROM EXTREMES IN TEMPERATURE IN A RANGE SPECIFIED BY THE MANUFACTURER.
- NO TEST STRIPS OR STICKS. EVER.
- MUST FOLLOW ANY EXPIRATION OR USE BY DATES.
- MUST HAVE A COPY OF THE MANUFACTURER'S DIRECTIONS AND MAY ONLY TEST FOLLOWING THE MANUFACTURER'S DIRECTIONS.
- FAILURE TO HAVE A COMPLETE, APPROVED TEST KIT SHALL RESULT IN SUSPENSION OF THE LICENSE.

pH VALUES

- 7.0 TO 7.8
- IF VALUES ARE OUTSIDE THIS RANGE, TAKE AQUATIC VENUE OUT OF SERVICE.

CHEMISTRY PARAMETERS

- FREE CHLORINE
 - SPAS: 3-10 PPM.
 - ALL OTHER AQUATIC VENUES: 2-10 PPM.
 - ALL VENUES: IF <1 OR >10, TAKE VENUE OUT OF SERVICE
- COMBINED CHLORINE
 - ALL VENUES: LESS THAN .4 PPM
- ALKALINITY: 60-180 PPM.
- CALCIUM HARDNESS: <2500 PPM.
- CYANURIC ACID: 90 PPM OR LESS.
- SATURATION INDEX: WATER SHALL BE NEITHER CORROSIVE OR SCALE FORMING.
- OTHER CHEMICALS: RANGE SPECIFIED BY MANUFACTURER.

CHEMICALS

- NO CHEMICAL MAY BE USED UNLESS LABELED FOR USE IN AQUATIC VENUES. MUST MAINTAIN A LEGIBLE COPY OF ALL LABELING ON SITE.
- USE IN ACCORDANCE WITH LABELING.
- IF LABELING VALUES ARE OUTSIDE RANGES SPECIFIED IN THIS CODE, THEY MAY NOT BE USED.
- CYANURIC ACID IN INDOOR POOLS = NO.
- CYANURIC ACID IN OUTDOOR POOLS = ONLY AS DICHLOR OR TRICHLOR.
- BROMINE/COPPER/SILVER: TALK TO YOUR INSPECTOR.

UV LIGHT

- REQUIRED ON ANY VENUE INTENDED FOR USE BY CHILDREN.
- IF PRESENT, MUST BE OPERATED AND MAINTAINED IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.
- SHALL BE MONITORED AND HAVE CERTAIN DATA POINTS RECORDED AS PER TABLE FOUND IN SECTION 8-16(H) OF THE CODE.
- PRESENCE OF A UV SYSTEM DOES NOT CHANGE ANY OTHER WATER CHEMISTRY PARAMETERS.

SUPERCHLORINATION

- TAKE THE AQUATIC VENUE OUT OF SERVICE.
- RAISE FREE CHLORINE TO A LEVEL THAT IS AT LEAST 10 PPM HIGHER THAN NORMAL REQUIRED OPERATING LEVEL.
- MAINTAIN FOR A TIME THAT IS AT LEAST 4 TIMES THE MAXIMUM ALLOWED TURNOVER TIME OR 12 HOURS, WHICHEVER IS LONGER.
- RETURN ALL CHEMISTRY VALUES TO APPROVED RANGES PRIOR TO PUTTING THE VENUE BACK INTO SERVICE.
- MANDATORY:
 - AT BEGINNING OF SEASON FOR SEASONAL FACILITIES.
 - EVERY TIME CIRCULATION SYSTEM IS SHUT DOWN FOR >24 HOURS.
 - ANY TIME THERE IS A FAILED MICROBIOLOGICAL TEST.

SECTION 9: PHYSICAL FACILITIES

- THIS SECTION PERTAINS TO FLOORS, WALLS, CEILINGS AND EQUIPMENT.
- FACILITIES THAT WERE IN OPERATION PRIOR TO IMPLEMENTATION OF THE 2025 CODE WERE ALLOWED TO CONTINUE OPERATING BUT GOING FORWARD ALL PARTS OF THE PHYSICAL FACILITY WILL BE HELD TO THE STANDARDS OF THE 2025 CODE.
- WHERE ANY PARTS OF THE PHYSICAL FACILITY WERE OUT OF COMPLIANCE WITH THE 2025 CODE, THOSE PARTS MUST BE BROUGHT INTO COMPLIANCE BY JANUARY 1, 2027.

CLEANING/MAINTENANCE/ OPERATION

- ALL PARTS OF THE PHYSICAL FACILITY SHALL BE MAINTAINED IN GOOD REPAIR AND SO THAT ALL ORIGINAL AND INTENDED FUNCTIONALITY IS MAINTAINED AND SO THERE IS NO INCREASED HEALTH OR SAFETY RISK FROM USE OVER THAT INITIALLY PRESENT WHEN NEW.
- ALL PARTS OF THE PHYSICAL FACILITY SHALL BE CLEAN TO SIGHT AND TOUCH.
- MAINTAIN SURFACES FREE OF MOLD AND MILDEW.
- INDOOR AIR TEMPS SHALL BE MAINTAINED AS PER ORIGINAL DESIGN SPECIFICATIONS. IF THIS INFORMATION IS NOT AVAILABLE, TEMPS SHALL BE MAINTAINED SO THAT THE DEW POINT IS LESS THAN THE DEW POINT OF THE INTERIOR WALLS.
- DECK SHALL BE FREE OF STANDING WATER.

SPA WATER

- SPAS SHALL BE DRAINED, CLEANED, SCRUBBED AND HAVE THE WATER REPLACED.
- $\text{INTERVAL IN DAYS} = \text{VOLUME IN GALLONS} \div 3 \times \text{AVERAGE NUMBER OF USERS PER DAY}$
- INTERVAL MAY NOT BE LONGER THAN 14 DAYS.

CIRCULATION SYSTEM

- INCLUDES PUMPS, STRAINERS, FILTERS, VALVES, GUAGES, METERS, HEATERS, SKIMMERS, INLETS, OUTLET FITTINGS, PIPING, CHEMICAL FEEDERS, AND CONTROLLERS.
- MUST BE OPERATING CONTINUOUSLY DURING THE SEASON OF OPERATION FOR ANY AQUATIC VENUE.
- SHALL BE OPERATED AT THE RATE OF FLOW SPECIFIED ON THE ORIGINAL DESIGN PLANS, AND AT A RATE OF FLOW SUFFICIENT TO MEET ALL CODE PARAMETERS.
- IF ORIGINAL RATE OF FLOW IS UNKNOWN, THE OPERATING RATE OF FLOW MUST MEET CODE TURNOVER TIME REQUIREMENTS WITHOUT EXCEEDING FILTER MEDIA RATE VALUES.

CIRCULATION SYSTEM: FILTERS

- CLEAN, MAINTAIN AND BACKWASH ACCORDING TO THE MANUFACTURER'S DIRECTIONS.
- CLEAN, MAINTAIN AND BACKWASH ONLY WHEN THE VENUE IS CLOSED TO PATRON USE.
- VENUE SHALL REMAIN CLOSED FOR MINIMUM 5 MINUTES AFTER BACKWASHING UNTIL OPERATOR ENSURES THAT THE SYSTEM IS RUNNING AND FEEDING CHEMICALS PROPERLY.
- CARTRIDGE FILTRATION: MUST HAVE MINIMUM 2 COMPLETE SETS OF CARTRIDGES ON HAND WITH ONE IN USE AND ONE IN A CLEAN AND DRY CONDITION.
- CLEAN FILTERS AND HOUSINGS AS PER MANUFACTURER'S INSTRUCTIONS. IN ABSENCE OF THOSE, FOLLOW THE PROCEDURES IN SECTION 9-9.

CIRCULATION SYSTEM: DRAINS AND SUCTION OUTLET COVERS

- MUST HAVE MANUFACTURER'S DOCUMENTATION FOR COVERS AND SUMPS.
- ANY LOOSE, BROKEN, MISSING SUCTION OUTLET COVERS: TAKE VENUE OUT OF SERVICE IMMEDIATELY.



CHEMICAL FEED EQUIPMENT

- DISINFECTANT AND pH CHEMICALS CAN ONLY BE DELIVERED THROUGH AUTOMATIC FEED EQUIPMENT.
- NO CHEMICAL CONTAINERS, OTHER CHEMICAL FEEDERS OR ANY ELECTRONIC EQUIPMENT CAN BE LOCATED UNDER CHEMICAL FEEDERS.
- MUST MAINTAIN ONE COMPLETE SET OF SPARE FEEDER TUBES FOR PERISTALTIC FEEDER PUMPS.
- ALL PARTS OF THE CHEMICAL FEED SYSTEMS SHALL BE CHECKED DAILY FOR LEAKS AND THE RESULTS RECORDED IN THE DAILY LOG.

AUTOMATED CONTROLLERS

- MANDATORY.
- MUST CONTROL ALL FEEDING OF ALL DISINFECTION AND pH CHEMICALS IN AUTOMATIC MODE.
- IF THE CONTROLLER IS ALARMING OR IN MANUAL MODE, AQUATIC VENUE SHALL BE TAKEN OUT OF SERVICE.
- ONLY THE QUALIFIED OPERATOR MAY MAKE ANY ADJUSTMENTS TO THE CONTROLLER.

AQUATIC FEATURES

- START PUMPS AND RUN LONG ENOUGH TO FLUSH ALL LINES WITH TREATED WATER PRIOR TO ALLOWING PATRONS CONTACT WITH THE WATER.
- THE WATER FROM THE FEATURES SHALL BE TESTED FOR FREE CHLORINE, TOTAL CHLORINE AND pH AND SHALL BE IN THE ACCEPTABLE RANGE PRIOR TO PATRONS HAVING CONTACT WITH THE WATER.

CHEMICAL STORAGE

- SHALL ALWAYS BE STORED SO AS TO BE INACCESSIBLE BY ANY PERSONS THAT ARE NOT STAFF.
- NO IGNITION SOURCES (GAS, DIESEL, NATURAL GAS OR GAS-POWERED EQUIPMENT, GRILLS) ARE ALLOWED IN CHEMICAL STORAGE AREAS.
- SMOKING PROHIBITED WITHIN 100 FEET OF CHEMICAL STORAGE AREAS OR CHEMICAL CONTAINERS.
- MUST BE SEPARATE FROM ANY EQUIPMENT OR MECHANICAL ROOMS.
- MUST HAVE NFPA OR HMIS SIGNAGE POSTED ON STORAGE SPACE DOORS.



SAFETY EQUIPMENT

- LANDLINE PHONE.
- FIRST AID KIT (MINIMUM CONTENTS SPECIFIED IN CODE).
- LIFEGUARDS:
 - BACKBOARDS.
 - RESCUE TUBES.
- NO LIFEGUARDS:
 - COAST GUARD APPROVED THROWING RINGS WITH ADEQUATE ROPE.
 - A NON-TELESCOPIC REACHING POLE OF 12-16 FEET WITH SECURELY ATTACHED SHEPHERD'S CROOK.

SIGNAGE (ALL FACILITIES)

- GIVING THE LOCATION OF THE TELEPHONE.
- DIRECTIONS FOR THE TELEPHONE, AQUATIC FACILITY ADDRESS, CONTACT NUMBERS FOR EMERGENCY PERSONNEL.
- GIVNING THE LOCATION OF FIRST AID KIT AND EMERGENCY EQUIPMENT.
- OPERATING HOURS AND STATING THAT UNAUTHORIZED USE OUTSIDE THOSE HOURS IS PROHIBITED.
- MANUFACTURER'S SIGNAGE FOR WATERSLIDES AND LANDING POOLS.
- ALL AREAS <5 FEET IN DEPTH REQUIRE NO DIVING SIGNAGE.
- DIVING BOARD RULES.
- CAPACITY FOR EACH AQUATIC VENUE.
- REQUIRING SWIM DIAPERS FOR ALL INCONTINENT INDIVIDUALS.
- SHOWERING IS MANDATORY BEFORE ENTERING ANY VENUE.
- SPA RULES.

SIGNAGE (NO LIFEGUARDS)

- POSTERS SHOWING LATEST CPR PROGRAMS AND PROTOCOLS.
- LIST OF IMMEDIATE HEALTH HAZARDS THAT MANDATE VENUE CLOSURE AND A TELEPHONE NUMBER TO REPORT SUCH HAZARDS TO THE OPERATOR/OWNER.
- NO LIFEGUARD ON DUTY.
- NO PERSONS UNDER AGE 14 MAY BE PRESENT WITHOUT DIRECT SUPERVISION BY A PERSON AGE 18 OR OLDER.
- NO YOUTH GROUPS, TRAINING, LIFEGUARD COURSES, OR SWIMMING LESSONS MAY OCCUR WITHOUT A QUALIFIED LIFEGUARD PRESENT AND ON DUTY.

ELECTRICAL SAFETY

- OUTLETS MUST HAVE GFCI PROTECTION AS REQUIRED BY CODE.
 - TEST AND RECORD RESULTS IN A LOG MONTHLY, OR MORE OFTEN AS REQUIRED BY MANUFACTURER.
- GROUNDING/BONDING:
 - MUST BE MAINTAINED INTACT AND FUNCTIONAL AS DESIGNED.
 - ANY GROUNDING OR BONDING DISCONNECTIONS OR INTERRUPTIONS SHALL RESULT IN VENUE BEING TAKEN OUT OF SERVICE IMMEDIATELY.
- CORDED DEVICES MAY NOT BE USED WITHIN 6 FEET OF ANY WATER UNLESS PLUGGED INTO GFCI OUTLET.
- EXTENSION CORDS:
 - PROHIBITED EXCEPT FOR TEMPORARY PURPOSES (MAINTENANCE, REMODELING OR REPAIR).
 - MAY NOT BE WITHIN 6 FEET OF ANY WATER.
 - ONLY PLUGGED INTO GFCI PROTECTED CIRCUIT.

APPENDIX A

SATURATION INDEX

THANK YOU

QUESTIONS?