

**FIRST DISTRICT HEALTH UNIT
2024 AQUATIC
VENUE SEMINAR**

**FIRST DISTRICT HEALTH UNIT (FDHU)
ENVIRONMENTAL HEALTH DIVISION**

FDHU AQUATIC FACILITY RULES AND REGULATIONS

JAYME CALAVERA RS/REHS
ENVIRONMENTAL HEALTH DIVISION

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 FDHU

SECTION 1

- REQUIRES ALL PUBLIC AND SEMI-PUBLIC AQUATIC VENUES TO BE INSPECTED ANNUALLY
- PROVISION FOR REGULATIONS AND STANDARDS TO MAKE AQUATIC VENUES SAFE AND HEALTHFUL

SECTION 2

- DURING EACH MONTH OF OPERATION, EACH AQUATIC VENUE SHALL SUBMIT A WATER SAMPLE FOR ANALYSIS
- CERTIFIED LAB (EX. FDHU LAB IN MINOT)

SECTION 3

- DISTRICT HEALTH OFFICER (OR HIS DESIGNATE) MAY CLOSE ANY FACILITY DETERMINED TO BE A HEALTH OR SAFETY HAZARD
- THE DEPARTMENT CAN ABATE OR SUSPEND THE USE OF ANY SUCH FACILITY UNTIL IT IS NO LONGER A HEALTH HAZARD

FDHU AQUATIC VENUE RULES AND REGULATIONS

- REVISED IN 2008.
- EFFECTIVE STARTING JANUARY 1, 2009.
- PROPOSED NEW REGULATIONS FOR 2025.
- COVERS AQUATIC VENUE DESIGN PARAMETERS AND DAILY AND SEASONAL OPERATIONAL REQUIREMENTS.

THESE REGULATIONS ONLY APPLY TO AQUATIC FACILITIES LOCATED IN THE FDHU

- FIRST GROUP OF SLIDES IS ABOUT THE CURRENT CODE
- ANY ITEMS IN **RED** ARE CHANGES IN THE NEW CODE
- LAST GROUP OF SLIDES WILL BE NEW ITEMS FROM THE PROPOSED 2025 CODE

SECTION 1

- EACH AQUATIC VENUE SHALL SUBMIT A WATER SAMPLE EACH MONTH THAT IT IS IN OPERATION.
- FDHU MAY CLOSE ANY AQUATIC VENUE DEEMED TO BE A HEALTH OR SAFETY HAZARD.

SECTION 2

- DEFINITIONS

- | “SWIMMING POOL”

- | “SPA”

- | “PUBLIC SWIMMING POOL”

- | “SEMI-PUBLIC SWIMMING POOL”

- | “APPROVED”

- | “AQUATIC VENUE”

SECTION 3

LICENSURE - NO PUBLIC OR
SEMI-PUBLIC AQUATIC
FACILITY MAY OPERATE
WITHOUT A LICENSE ISSUED
BY FDHU

SECTION 4

GENERAL REGULATIONS

SECTION 4-2

GENERAL FACILITY

- BATHER CAPACITY

- | 15 SQUARE FEET PER BATHER WHERE WATER IS LESS THAN 5 FEET DEEP
- | 20 SQUARE FEET PER BATHER WHERE WATER IS MORE THAN 5 FEET DEEP
- | MUST EXCLUDE 300 SQUARE FEET FOR EACH SLIDE OR DIVING BOARD
- | 10 SQUARE FEET PER BATHER IN A SPA

SECTION 4-4 DECKING

- 8 FEET OF UNOBSTRUCTED WALKWAY PRESENT AROUND ANY PUBLIC POOL
- 4 FEET OF UNOBSTRUCTED WALKWAY PRESENT AROUND ANY SEMI-PUBLIC POOL

SECTION 4-5 BATH HOUSES AND DRESSING ROOMS

- FLOORS AND SURFACES MUST BE CLEANED AND SANITIZED AT LEAST DAILY AND MORE OFTEN IF NECESSARY
- MUST HAVE SOAP AND TOWELS AT EACH LAVATORY AND SOAP AT EACH PAIR OF SHOWERHEADS

SECTION 4-6 CPO'S AND LIFEGUARDS

- ALL AQUATIC VENUES MUST BE UNDER THE SUPERVISION OF A CPO (CERTIFIED BY THE PHTA)
- ALL PUBLIC AQUATIC VENUES (AND SEMI-PUBLIC AQUATIC VENUES WITH MORE THAN 2000 SQUARE FEET OF SURFACE AREA) MUST BE STAFFED WITH RED CROSS OR YMCA CERTIFIED LIFEGUARDS
- ONE LIFEGUARD PER 2000 SQUARE FEET OF SURFACE AREA OR FRACTION THEREOF/ONE LIFEGUARD PER 25 BATHERS
- AT ALL TIMES THAT AN AQUATIC VENUE IS OPEN, THERE SHALL BE SOMEONE PRESENT THAT IS IN CHARGE OF OPERATIONS - THIS PERSON MUST BE KNOWLEDGABLE IN REGARDS TO AQUATIC VENUE SAFETY AND CORRECT OPERATIONAL PRACTICES

SECTION 4-6 SAFETY EQUIPMENT

- MUST HAVE ONE SET OF LIFESAVING EQUIPMENT

- | SHEPHERDS CROOK
- | THROWING RINGS
- | TELEPHONE
- | FIRST AID KIT
- | BACKBOARD (IF AQUATIC VENUE HAS DIVING BOARD OR SLIDES)

- MUST HAVE CERTAIN PIECES OF SIGNAGE

- | SIGNS PROHIBITING DIVING WHERE POOL IS LESS THAN 5 FEET DEEP
- | DIVING BOARD SIGNAGE
- | SIGN STATING HOURS OF USE AND BATHER CAPACITY
- | NOTICE THAT SWIM DIAPERS ARE REQUIRED FOR ANY INCONTINENT INDIVIDUALS
- | SIGN STATING THAT SHOWERING IS MANDATORY BEFORE ENTERING AQUATIC VENUE
- | SPA RULES (IF SPA IS PRESENT)
- | IF A SLIDE IS PRESENT, SIGNAGE REQUIRING SLIDING FEET FIRST ONLY

SECTION 4-6 SAFETY PRACTICES

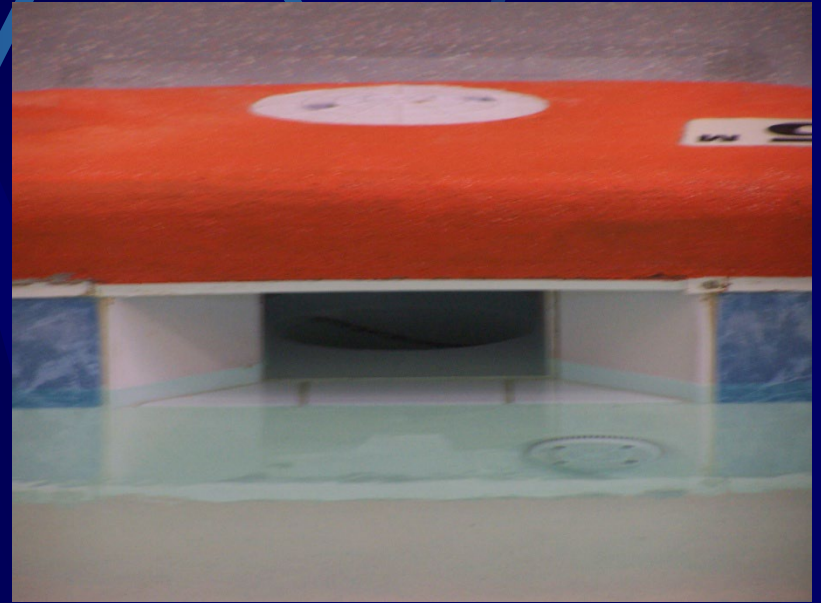
- IF ELECTRICAL, WATER OR SEWER SERVICES ARE INTERRUPTED- CLOSE AQUATIC VENUE
- THUNDERSTORMS- CLEAR SWIMMERS FROM AQUATIC VENUE AND DECK AT FIRST SOUND OF THUNDER
- MUST HAVE ALL MSDS SHEETS- LABEL CHEMICALS
- STORE CHEMICALS IN ORIGINAL CONTAINERS, MAY NOT REUSE CHEMICAL CONTAINERS
- SICK EMPLOYEES SHALL BE EXCLUDED- NEED APPROVAL FROM FDHU BEFORE THEY CAN COME BACK TO WORK
- IF EMPLOYEES TEST POSITIVE FOR WATER TRANSMISSABLE ILLNESSES- EXCLUDE AND NOTIFY FDHU

SECTION 4-7 CIRCULATION

- CIRCULATION SYSTEM MUST BE RUNNING 24 HOURS A DAY DURING SEASON THAT AQUATIC VENUE IS OPEN FOR BUSINESS
- READINGS MUST BE TAKEN FROM RATE OF FLOW GAUGE AND RECORDED IN DAILY RECORD AT LEAST WEEKLY (DAILY)
- SUCTION ENTRAPMENT

CIRCULATION SYSTEM- INLETS/GUTTERS

- SYSTEM SHALL BE SET UP SO THAT 75 PERCENT OF THE WATER ENTERING THE SYSTEM COMES FROM THE INLETS/GUTTER SYSTEM



CIRCULATION SYSTEM - PIPING AND VALVES

- ALL PIPING, VALVES AND APPURTENANCES SHALL BE LABELED TO INDICATE CONTENTS AND FUNCTION



SECTION 4-8 DISINFECTION

- CHLORINE AND BROMINE ARE THE APPROVED DISINFECTANTS
- DISINFECTION SYSTEM MUST BE OPERATIONAL AT ALL TIMES
- UV SANITIZERS



SECTION 4-9

OPERATIONAL PRACTICES

- pH VALUE SHALL BE BETWEEN 7.2 AND 7.8; IF IT FALLS OUT OF THIS RANGE - CLOSE AQUATIC VENUE (7.0-7.8)
- IF FREE CHLORINE IS LESS THAN 1 PPM - CLOSE AQUATIC VENUE
- IF TOTAL CHLORINE IS ABOVE 10 PPM - CLOSE AQUATIC VENUE
- FREE CHLORINE SHOULD BE 2-4 PPM IN POOLS (2-10) AND 3-5 PPM IN SPAS (3-10)
- IF COMBINED CHLORINE IS GREATER THAN .5 PPM, BREAKPOINT CHLORINATION SHALL BE DONE (.4)

OPERATIONAL PRACTICES - DAILY RECORD

- SHALL KEEP A DAILY RECORD; IT MUST INCLUDE:

- | ALL CHEMICAL ADDITIONS DONE
- | ANY FECAL, VOMIT OR BLOOD CONTAMINATION INCIDENTS
- | ANY INJURIES OR REPORTS OF RWI
- | RESULTS OF ANY CHEMICAL TESTS DONE
- | ANY UNUSUAL OCCURRENCES
- | BATHER LOAD

OPERATIONAL PRACTICES - WATER TESTING

- AQUATIC VENUE WATER SHALL BE TESTED FOR FREE AND TOTAL CHLORINE AND pH AT OPENING AND THEN AT LEAST EVERY TWO HOURS WHILE THE AQUATIC VENUE IS OPEN FOR USE (NOT LESS THAN 4 TIMES PER DAY)
- READINGS FOR FREE AND TOTAL CHLORINE AND pH SHALL BE RECORDED IN THE DAILY RECORD FOR ALL TESTS TAKEN DURING A DAY - ALSO RECORD INITIALS OF TESTER AND TIME TEST DONE

OPERATIONAL PRACTICES - TEST KITS

- TEST KIT SHALL BE CAPABLE OF TESTING FROM THE MINIMUM TO MAXIMUM SAFE RANGES (LESS THAN 1 PPM TO GREATER THAN 10 PPM) (0-11)
- TEST KIT MUST BE ABLE TO TEST FROM 0 TO 5 PPM IN NO LARGER THAN .5 PPM INCREMENTS (ENTIRE RANGE: STEPS NO LARGER THAN .2 PPM)
- TEST KIT MUST BE ABLE TO TEST pH IN INCREMENTS NO GREATER THAN .2

OPERATIONAL PRACTICES- TEST KITS (CONTINUED)

- MUST ALSO BE ABLE TO TEST FOR CALCIUM HARDNESS, ALKALINITY AND CYANURIC ACID (IF APPLICABLE)
- REAGENTS IN TEST KIT MUST BE REPLACED AT LEAST EVERY 6 MONTHS

OPERATIONAL PRACTICES- PATRON REQUIREMENTS

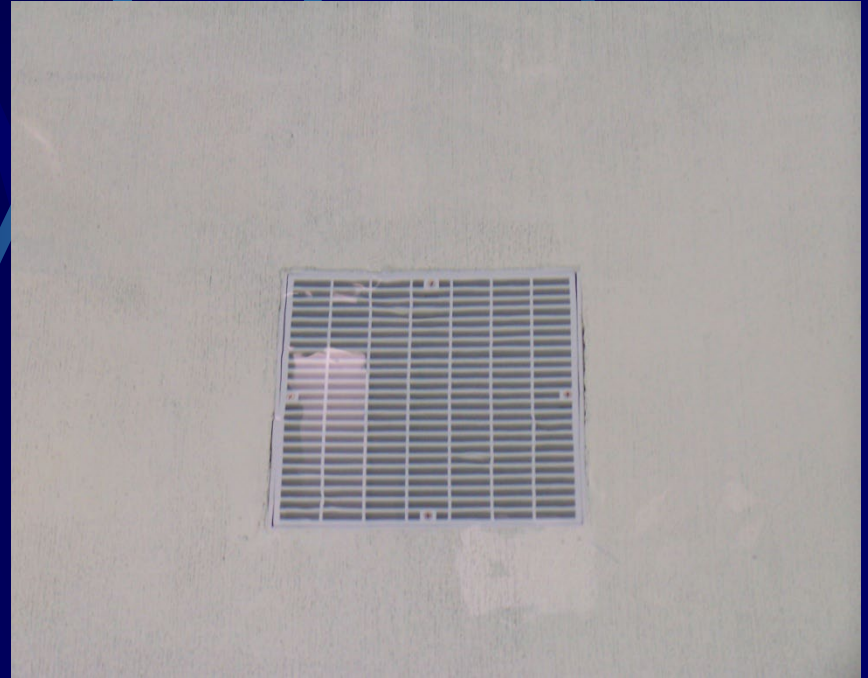
- INFANTS AND INCONTINENT INDIVIDUALS SHALL BE REQUIRED TO WEAR SWIM DIAPERS
- PATRONS SHALL BE REQUIRED TO SHOWER BEFORE ENTERING AQUATIC VENUE

OPERATIONAL PRACTICES- CLEANLINESS

- ENTIRE FACILITY SHALL BE MAINTAINED IN A CLEAN MANNER
- BOTTOM OF AQUATIC VENUE BASIN SHALL BE FREE OF DEBRIS
- DECK SHALL BE SANITIZED DAILY

OPERATIONAL PRACTICES- WATER CLARITY

IF MAIN DRAIN IS
NOT VISIBLE
FROM DECK,
CLOSE AQUATIC
VENUE



OPERATIONAL PRACTICES- INDOOR AQUATIC VENUES

- MUST HAVE A THERMOMETER AND HYGROMETER WITH SENSORS LOCATED IN AQUATIC VENUE ROOM
- HUMIDITY SHALL NOT EXCEED 60 PERCENT
- TEMPERATURE SHALL BE BETWEEN 75 AND 82 DEGREES (ORIGINAL SPECIFICATIONS; OR TO MAINTAIN THE DEW POINT LESS THAN THE DEW POINT OF THE EXTERIOR WALLS)

OPERATIONAL PRACTICES- WATER TEMPERATURE

- THERMOMETER IN BASIN
- POOL WATER SHALL BE AT LEAST 65 DEGREES BUT NOT MORE THAN 90 DEGREES
- SPA WATER SHALL BE AT LEAST 65 DEGREES BUT NOT MORE THAN 105 DEGREES
- (MAXIMUM TEMP IS 104 DEGREES)

SECTION 4-10 INTERACTIVE WATER FOUNTAINS

- WHERE APPLICABLE, SAME STANDARDS APPLY AS FOR ANY OTHER AQUATIC VENUE
- SEPARATE PUMPS FOR FILTRATION AND FOR ANY ATTRACTIONS
- SPLASH ZONE SLOPED TO PREVENT STANDING WATER
- NO WATER FROM OUTSIDE THE SYSTEM MAY ENTER THE SYSTEM

APPENDIX A

BREAKPOINT CHLORINATION

APPENDIX B

LANGELIER SATURATION INDEX

APPENDIX C

WATER BALANCE RANGES

APPENDIX D

AMOUNT OF CHEMICAL
NEEDED TO TREAT 10,000
GALLONS OF WATER

APPENDIX E

CHEMICAL CALCULATIONS

APPENDIX F

FECAL CONTAMINATION PROCEDURES

CRYPTOSPORIDIUM CT VALUE:
15,300

APPENDIX G

BODY FLUID CONTAMINATION PROCEDURES

APPENDIX H

MODEL DIVING
BOARD, SPA AND
POOL RULES

2025 FDHU AQUATIC FACILITY RULES AND REGULATIONS

- PROPOSED EFFECTIVE DATE: JANUARY 1, 2025.
- BASED ON THE MODEL AQUATIC HEALTH CODE (CDC) (CONSTRUCTION STANDARDS ALSO INCLUDE THE INTERNATIONAL SWIMMING POOL AND SPA CODE).
- A TOTAL REVAMP OF THE POOL CODE.

2025 CODE

ENTIRE CODE HAS BEEN REORGANIZED AND STANDARDIZED TO ALIGN WITH OTHER FDHU CODES. THE FOLLOWING SLIDES HIGHLIGHT SOME OF THE CHANGES FOUND IN THE 2025 CODE.

2025 Code

- SECTION 1: GENERAL INTENT
- SECTION 2: DEFINITIONS
- SECTION 3: LICENSING
- SECTION 4: INSPECTION
- SECTION 5: CONSTRUCTION AND UTILITIES
- SECTION 6 MANAGEMENT AND PERSONNEL
- SECTION 7: POLICIES, PROCEDURES, AND RECORD KEEPING
- SECTION 8: WATER QUALITY, TREATMENT, FILTRATION, AND CIRCULATION
- SECTION 9: PHYSICAL FACILITIES
- SECTION 10: SPECIAL VENUES
- SECTION 11: COMPLIANCE AND ENFORCEMENT

SECTION 2: DEFINITIONS

- GREATLY EXPANDED TO INCLUDE RELEVANT DEFINITIONS FROM THE MAHC
- AQUATIC VENUE
- QUALIFIED OPERATOR
- RESPONSIBLE SUPERVISOR

SECTION 3: LICENSING

- ALL AQUATIC FACILITIES MUST HAVE A LICENSE PRIOR TO BEING PUT INTO SERVICE
- PLAN REVIEW
- LICENSING PACKET
- LICENSES VALID DATE OF ISSUANCE/JANUARY 1 TO DECEMBER 31

SECTION 4: INSPECTION

- AQUATIC FACILITIES INSPECTED AT LEAST ONCE ANNUALLY
- SEASONAL AQUATIC FACILITIES: ANY CHANGES TO POLICIES/PROCEDURES, CIRCULATION AND DISINFECTION SYSTEMS, QUALIFIED OPERATORS MANDATE PRE-OPENING INSPECTION
- INSPECTION MAY NOT BE REFUSED
- FALLING BELOW MINIMUM STANDARD RESULTS IN MANDATORY REINSPECTION (REINSPECTION FEE)

SECTION 5: CONSTRUCTION AND UTILITIES

- CONSTRUCTION STANDARDS ADOPTED BY REFERENCE FROM THE MAHC AND ISPSC
- ALL CONSTRUCTION MUST BE IN COMPLIANCE WITH FIRE, PLUMBING, ELECTRICAL, BUILDING AND MECHANICAL CODES

SECTION 6 MANAGEMENT AND PERSONNEL

- QUALIFIED OPERATOR: ONSITE OR BE IMMEDIATELY AVAILABLE WITHIN 2 HOURS
- IF QUALIFIED OPERATOR IS NOT ON SITE, A RESPONSIBLE SUPERVISOR SHALL BE PRESENT
- CRITERIA FOR PRESENCE OF/NUMBER OF LIFEGUARDS HAS BEEN EXPANDED
- LIFEGUARD DUTIES AND OTHER CRITERIA HAVE BEEN DELINEATED
- AQUATIC FACILITIES SHALL HAVE A DESIGNATED SAFETY TEAM TO:
 - | ENFORCE FACILITY RULES AND REGULATIONS,
 - | RESPOND TO ONSITE EMERGENCIES,
 - | IDENTIFY ONSITE HAZARDS AND MITIGATE THEM,
 - | KNOW LOCATION AND CORRECT USE OF ANY REQUIRED PPE,
 - | ENSURE SAFETY AND MAINTENANCE INSPECTIONS ARE DONE AND RECORDED, AND
 - | INTERFACE WITH THE DEPARTMENT RELATED TO CODE REQUIREMENTS.

SECTION 7: POLICIES, PROCEDURES, AND RECORD KEEPING

- DELINEATES DUTIES OF LICENSE HOLDER
- DELINEATES AND CLARIFIES THE CRITERIA FOR IMMEDIATE CLOSURE OF AN AQUATIC FACILITY
- DETAILS WHAT MUST OCCUR WHEN AN AQUATIC VENUE IS TAKEN OUT OF SERVICE AND WHAT MUST OCCUR FOR IT TO BE PLACED BACK INTO SERVICE
- AQUATIC FACILITIES ARE REQUIRED TO HAVE CERTAIN PLANS IN PLACE AND DETAILS WHAT MUST BE INCLUDED IN EACH PLAN
 - OPERATIONS PLAN
 - TRAINING PLAN
 - SAFETY PLAN
 - ACCIDENTAL CHEMICAL RELEASE PLAN
 - EVACUATION PLAN
 - COMMUNICATIONS PLAN
 - INCLEMENT WEATHER PLAN
 - AIR QUALITY OPERATIONS PLAN (FOR INDOOR AQUATIC VENUES)

SECTION 7: POLICIES, PROCEDURES, AND RECORD KEEPING (CONTINUED)

- PROVIDES CRITERIA FOR CONTAMINATION RESPONSE PLAN AND DETAILS THE PROCEDURES FOR REMEDIATION
- DETAILS PROCEDURES FOR WATER SAMPLE COLLECTION
- PROVIDES CRITERIA FOR MANDATED DAILY INSPECTION

SECTION 7: POLICIES, PROCEDURES, AND RECORD KEEPING (CONTINUED)

- WATER PARAMETER TESTING:

DAILY:

FREE AND TOTAL CHLORINE, pH, ORP, TEMP, CYANURIC ACID (IF APPLICABLE), COPPER/SILVER (IF APPLICABLE)

WEEKLY:

ALKALINITY, SALT LEVELS (IF APPLICABLE)

MONTHLY:

CA HARDNESS, SATURATION INDEX

QUARTERLY:

TDS

SECTION 7: POLICIES, PROCEDURES, AND RECORD KEEPING (CONTINUED)

- DAILY LOG:

- | ALL WATER PARAMETER TESTS
- | RESULTS OF ALL MICROBIOLOGICAL TESTS
- | READING FROM THE RATE OF FLOW GAUGE (EACH AQUATIC VENUE)
- | RECORDS OF ALL EQUIPMENT CALIBRATIONS
- | RECORDS OF FILTER MAINTENANCE AND UPKEEP
- | RECORD OF ALL INJURIES AND ILLNESSES OBSERVED OR REPORTED
- | RESULTS OF REQUIRED MONTHLY TESTING OF CHEMICAL FEEDER INTERLOCK SYSTEM
- | RESULTS OF DAILY EVALUATION OF CHEMICAL FEED EQUIPMENT
- | DOCUMENTATION OF ANY MALFUNCTIONING EQUIPMENT, EQUIPMENT FAILURE, POWER OUTAGES, INTERRUPTION OF CIRCULATION, FILTRATION OR DISINFECTION SYSTEMS FOR >1 HOUR
- | DAILY ATTENDANCE
- | NAME OF PERSON PERFORMING MANDATED DAILY INSPECTION

CHAPTER 8: WATER QUALITY, TREATMENT, FILTRATION, AND CIRCULATION

● DAILY DISCHARGE WATER

- | A VOLUME TOTALING AT LEAST 4 GALLONS PER BATHER PER DAY SHALL BE EITHER:
 - | DISCHARGED FROM THE SYSTEM TO WASTE, OR
 - | TREATED USING AN APPROVED ALTERNATE SYSTEM AND REUSED
- | MAY INCLUDE BACKWASH WATER

SECTION 9: PHYSICAL FACILITIES

● AQUATIC FEATURES:

- | STARTED AND ALLOWED TO RUN LONG ENOUGH TO FLUSH LINES WITH CHLORINATED WATER
- | FEATURE WATER SHALL BE TESTED AND MEET WATER QUALITY PARAMETERS PRIOR TO FEATURES BEING PUT INTO SERVICE

● SPA WATER DRAINAGE/REPLACEMENT

- | SPAS DRAINED AND WATER REPLACED AT AN INTERVAL BASED ON GALLONAGE AND NUMBER OF USERS PER DAY, MAXIMUM INTERVAL IS 14 DAYS
- | ALL SURFACES CLEANED PRIOR TO REFILLING

● CONTROLLERS:

- | QUALIFIED OPERATOR IS ONLY PERSON THAT CAN OPERATE/ADJUST CONTROLLER
- | IF A CONTROLLER IS ALARMING, AQUATIC VENUE SHALL BE TAKEN OUT OF SERVICE UNTIL NORMAL CONTROLLER FUNCTION IS RESTORED

SECTION 9: PHYSICAL FACILITIES (CONTINUED)

- PROVISIONS FOR HANDLING OF SHARED ITEMS (SWIM SUITS, TOWELS, OTHER ITEMS)
- PROVISIONS FOR ELECTRICAL SAFETY:
 - | GFCI OUTLETS
 - | GROUNDING OF ALL PARTS OF THE SYSTEM
 - | BONDING CONDUCTORS
 - | EXTENSION CORDS

SECTION 10: SPECIAL VENUES

- FLOTATION TANKS
- DIFFERENT FROM MOST AQUATIC VENUES, SO THERE ARE DIFFERENT STANDARDS FOR THEIR OPERATION
- MUST USE EITHER OZONE OR UV SYSTEMS FOR DISINFECTION

SECTION 11: COMPLIANCE AND ENFORCEMENT

- DETAILS THE CRITERIA AND CONDITIONS FOR SUMMARY LICENSE SUSPENSION
- DETAILS THE PROCESS FOR HEARINGS
- DETAILS THE PROCESS FOR CRIMINAL PROCEEDINGS

THANK YOU

QUESTIONS?