



State of Louisiana
Department of Health and Hospitals
OFFICE OF PUBLIC HEALTH

December 17, 2015

Brian Mistich, P.E.
Engineer
554 Old Spanish Trail,
Slidell, LA 70458

RE: 530 Natchez St. Class C Swimming Pool
New Orleans, LA

Dear Mr. Mistich,

Plans and specifications for the above named project have been reviewed. The plans are **DISAPPROVED** pending resolution of the following items which appear to be in conflict with applicable provisions of the State Sanitary Code, or upon which further information is needed.

1. In the decking variance letter please indicate that an effective barrier is provided between the pool and the spa. Please show the barrier detail between the pool and spa on the plans. Plans page PL-1.2 detail B shows a handrail on the spa but is not reflected on the plan view on page PL-1.1. Please update PL-1.1. Also on plans please provide the information regarding the barrier height. The barrier must be placed on all sides where the pool and spa meet. 1st Edition CDC Model Aquatic Health Code (MAHC), 4.8.6.2.4.3, "Except where otherwise noted, all other BARRIERS not serving as part of an AQUATIC FACILITY ENCLOSURE shall not be less than 42 inches (1.1 m) in height."
2. In the parameter decking variance letter please have the engineer clarify that the following safety equipment will be provided for and that the following codes will be met:
 1. 1st Edition CDC Model Aquatic Health Code (MAHC), 4.8.1.5.1.3 Unguarded Aquatic Venues, "For unguarded POOLS, PERIMETER DECKS shall be provided in compliance with at least one of two options:

1) Provide PERIMETER DECK around 100% of the of the POOL perimeter; or

2) Provide PERIMETER DECK such that the entire perimeter and depth of the POOL is readily reachable by a pole and hook from the PERIMETER DECK.”

Also in the variance letter and on the plans please have the engineer clarify that the following items in the LAC code will be met.

2. LAC.51:XXIV.703.A, IN PART, “Class A, Class B, and Class C swimming pools shall have lifesaving equipment conspicuously and conveniently on hand at all times including the following:

1. a light, strong pole.... including a body hook;

2. a minimum 1/4 inch diameter throwing rope as long as 1 1/2 times the maximum width of the pool or 50 feet, whichever is less, to which has been firmly attached a ring buoy with an outside diameter of approximately 15 inches or a similar flotation device;

3. a telephone with posted names and phone numbers of nearest available police, fire, ambulance service and/or rescue unit, and/or 911, if available;”

3. Please clarify that all edges protruding into the pool will not have sharp corners. LAC.51:XXIV.323.N, “Deck(s) shall be edged, have a radius, or be otherwise relieved to eliminate sharp corners.”
4. Please clarify that the hose bibs called out on plans page PL-1.1 will have an appropriate vacuum breaker for back flow prevention. LAC.51:XXIV.323.S, “A hose bib and a vacuum breaker shall be provided for washing down the entire deck area.”
5. Please clarify if the pool steps will have slip resistant surfaces. LAC.51:XXIV.325.A. In part, “All treads shall have slip-resisting surfaces.”
6. Please clarify the type of handrail that will be used. Plans page PL-1.5 and plans page PL-1.2 show conflicting information regarding their handrails. Please clarify which handrail will be used and update both details. Also please be reminded of LAC.51:XXIV.327.A.3
7. Please clarify the type of pool ladder that will be used. Plans page PL-1.5 and plans page PL-1.2 show conflicting information regarding the dimensions of the pools ladder. Please clarify which ladder will be used and update both details. Also please be reminded of LAC.51:XXIV.329.
8. Please provide the velocities that will be in both spa and pool inlets and outlets. LAC.51:XXIV.503.A, “The water velocity in the pool piping shall not exceed 10 feet per second for discharge piping, (except for copper pipe where the velocity should not exceed

- 8 feet per second), and 6 feet per second for suction piping, unless summary calculations are provided to show that the greater flow is possible with the pump and piping provided. Pool piping shall be sized to permit the rated flows for filtering and cleaning without exceeding the maximum head of the pump.”
9. The return water inlets spacing on the shallow side of the pool exceed a length of 20 feet. LAC.51:XXIV.509.C.2. In part, “The maximum distance between inlets shall be 20 feet.”
 10. Please clarify if the open area of the main drain cover will be at least for times the area of the respective suction pipe. LAC.51:XXIV.511.C.1, “The main drain outlet grating shall have an area of openings four times the area of the discharge pipe to prevent objectionable suction effects.”
 11. Please clarify if the main drain suction covers for both the pool and spa and the skimmer equalizer line covers, will be rated to VGBA, ANSI/APSP 16-2011 .
 12. Please clarify if vertical wall depth markers will be placed on the side of the pool with no decking. LAC.51:XXIV.701.A.6, “Depth markers shall be installed at intermediate increments of water depth not to exceed 2 feet, nor spaced at distances greater than 25 foot intervals.” And LAC.51:XXIV.701.A.7, “Depth markers shall be arranged uniformly on both sides and both ends of the pool.”
 13. Please clarify the wattage that will be provided for the pools deck area. LAC.51:XXIV.715.A.1, “Where night activities are permitted and underwater lighting is used, not less than 0.5* watts shall be provided per square foot of pool area. Area lighting shall be provided for the deck areas and directed toward the deck areas away from the pool surface insofar as practical. 0.6 watts per square foot of deck area shall be used.” Also please reference the Model Aquatic Health Code 1st edition, August 2014, sections 4.6.1.3 for more information on the required foot candle levels.
 14. Please clarify if this pool is indoors. If the pool is indoors please provide ventilation that is compliant with the Model Aquatic Health Code 1st edition, August 2014, section 4.6.2. Also please reference LAC.51:XXIV.717.A. Also please clarify if the pool mechanical and storage rooms will be properly ventilated.
 15. Please clarify if thi facility is an apartment/condo complex or a hotel. Also please include on plans the locations of drinking fountains that will be serving the pool. Please provide a variance request for not having the correct number of dedicated plumbing fixtures for the pool. In the variance letter request a variance from the following code. Also include the number of floors of living units this pool will be serving, where will the restrooms for pool use be located, and the maximum horizontal distance between the furthest unit and the waters edge. LAC.51:XXIV.723.A, “One water closet and one urinal shall be provided for each 60 males or fraction thereof. One water closet shall be provided for each 30 females or fraction thereof. Female urinals, if provided, may be used in the same proportion as for men above. One lavatory with hot and cold water, under pressure delivered through a mixing faucet and soap shall be provided for each 60 patrons or

fraction thereof. Circular foot-operated lavatories, serving several persons at one time, may be used in some situations, such as in schools. One shower shall be provided for each 40 persons or fraction thereof. One drinking fountain shall be provided for each 100 persons or fraction thereof. Number of persons shall be calculated on the basis of pool load as described in §319 (Maximum User Load). (An equal distribution of males and females will be assumed unless otherwise indicated.)”

16. Please clarify if the salt water chlorinator for both the pool and the spa will have a TDS or salt readout and a low salt indicator. Model Aquatic Health Code 1st edition, August 2014, sections 4.7.3.2.6.4, “Electrolytic generators shall have a TDS or salt (NaCl) readout and a low salt indicator.”
17. Please clarify if the salt water chlorinators will have an interlock as described in 4.3.2.1.3, Model Aquatic Health Code 1st edition, August 2014, sections 4.7.3.2.6.7, “The generator(s) shall be interlocked per MAHC Section 4.7.3.2.1.3.” - Model Aquatic Health Code 1st edition, August 2014, sections 4.7.3.2.1.3, “Interlock Controls and No or Low Flow Deactivation. All chemical feeders shall be provided with an automatic means to be disabled through an electrical interlock with at least two of the following:
 - 1) Recirculation pump power,
 - 2) Flow meter/flow switch in the return line,
 - 3) Chemical control power and paddle wheel or flow cell on the chemical controller if safety test confirms feed systems are disabled through the controller when the pump is turned off, loses prime, or filters are backwashed.”
18. Please provide justification for having a bypass around the pool and spa chlorinator. LAC.51:XXIV.901.A.2, “The pool water shall be continuously disinfected by a disinfecting agent that imparts an easily measured residual. The disinfecting agent used shall be subject to field testing procedures that are simple and accurate.”
19. Please clarify how the pH will be controlled in the pool and the spa.
20. Please clarify the spas turn over time. On plans page PL-1.3 the flow rate in the calculations and the flow rate in the design data are different and give different turn over times. Please clarify. Model Aquatic Health Code 1st edition, August 2014, sections 4.7.5.2.1, “All SPAS as defined in the MAHC shall be designed to have a maximum allowable TURNOVER time of 0.5 hour or less.” Also please see MAHC section 4.7.5.2.3.
21. Please clarify what will be the maximum temperature of the spa. Model Aquatic Health Code 1st edition, August 2014, 4.12.1.7, “Water temperatures shall not exceed 104°F (40°C).”
22. Please clarify the number of depth markers to be provided for with the spa. Model Aquatic Health Code 1st edition, August 2014, 4.12.1.6, “A minimum of two depth markers shall be provided regardless of the shape or size of the SPA.”

23. Please clarify how the spa will be drained. Model Aquatic Health Code 1st edition, August 2014, 4.12.1.8, "A means to drain the SPA shall be provided to allow frequent draining and cleaning."
24. Please clarify how water back up will be prevented from entering into the air induction system. Model Aquatic Health Code 1st edition, August 2014, 4.12.1.9, "An air induction system, when provided, shall prevent water back up that could cause electrical shock hazards."
25. Please clarify the method that will be used to time the agitation. Model Aquatic Health Code 1st edition, August 2014, 4.12.1.10, "The agitation system shall be connected to a minute timer that does not exceed 15 minutes that shall be located out of reach of a BATHER in the SPA."
26. Please clarify if there will be an emergency shut off available. Model Aquatic Health Code 1st edition, August 2014, 4.12.1.11, "All SPAS shall have a clearly labeled emergency shutoff or control switch for the purpose of stopping the motor(s) that provide power to the RECIRCULATION SYSTEM and hydrotherapy or agitation system that shall be installed and be readily accessible to the BATHERS, in accordance with the NEC."
27. The under water seat bench variance letter indicates that the underwater seat bench horizontal depth will be 17 inches from the pools wall. Plans do not show this information. Please provide consistent information.

Sincerely,



Brandon Comeaux, E.I.
Region 1 Engineer Intern
OPH – District I