

# Loudoun County Health Department

P.O. Box 7000 1 Harrison Street Southeast Leesburg VA 20177-7000 Pool Plan Review and Application Packet

The following packet contains a list of instructions and requirements that must be met before submitting an application for a conventional swimming pool health permit. Included is a Plan Review Overview, Instructions with health notes, Checklist, Filter Room Placard and Application. Please take time to review the entire packet. A copy of the Loudoun county pool code is available at <a href="https://www.loudoun.gov/eh-urban">www.loudoun.gov/eh-urban</a>

All checklist items must be addressed if applicable. Please sign & return the checklist and other required materials/plans to our office. An environmental health specialist will be assigned your review when all required materials have been received, no more than 15 working days upon receipt.

If you are contemplating a waterpark facility with design and operational features which provide recreational activities that are different from those associated with a conventional swimming pool (e.g. water chutes, water flumes, slow rivers, activity pools, receiving pools, sprinklers, fountains, decorative showers, and wave pools) please contact us for a preliminary consultation.

## <u>Plan review success depends on the quality of information submitted.</u>

### **Overview: Swimming Pool and Water Recreation Facility Plan Review Process**

When: This applies to all public swimming pool facilities.

- 1. Proposed new public swimming pools.
- 2. Remodeling or equipment changes in an existing facility.

How: The process.

- 1. Site approval by Loudoun County Zoning Department.
- 2. Building Permit Application # (if available)
- 3. Well and septic evaluation by HD if not public water and sewer.
- 4. Submit application, drawings, and specs to Health Department.
- 5. An Environmental Health Specialist (EHS) does a PRELIMINARY review within 15 working days. EHS works with the contact person on design/equipment changes, and get missing documentation, etc.
- 6. EHS clears health department hold building permit.
- 7. EHS inspects facility (2-4 visits). EHS lists corrective action until approved for certificate of occupancy and health department permit.

What: Provide the following to the Health Department

- 1. "Plan Review Application"
- 2. A set of scale drawings with the plan highlighted by the checklist item number. The following are all items that will be used to determine if all of the pool health codes are addressed.
  - Pool / Filter System plans material specifications & equipment list, fittings, pool elevations, dimensions, construction details, piping, etc.
  - Deck materials, slopes, drainage, fencing & gate details, lighting, etc.
  - Bathhouse floor plan, electrical, plumbing, mechanical, lighting, finishes, floor slopes, etc.
  - Site plan pool backwash to sanitary or storm drain, emergency access, drainage, etc.
- 3. The list of equipment should be cross-referenced on the layout drawings.
- 4. Manufacturers specifications sheets (1 copy) on all equipment including:
  - Filters, pumps, flow meters, pressure gauges, pump curves, hypo-chlorinators, skimmers, ladders, fencing, gates, hot water heater, anti-scalding devices, etc.
- 5. Plumbing plans: Floor drains, HWH specs, backwash to storm or sanitary sewer, riser diagrams, etc.
- 6. Filter room, bathhouse, and deck: Electrical, mechanical plans, lighting, and architecture plans
  - Switches & receptacles, vapor-proof lights in filter room, telephone connections, ventilation, lighting schedule, finish schedule, floor slopes, etc.

## **Swimming Pool and Water Recreation Facilities Ordinance**

Public swimming pools and water recreation facilities to be constructed in accordance with the Loudoun County Swimming Pool and Water Recreation Facilities Ordinance, Chapter 838 of the Codified Ordinances passed December 18, 2007.

#### SWIMMING POOLS /SPA PLANS: The plans shall consist of the following:

A complete set of drawings/plans and one (1) set of manufacturer's specification sheets are required.

- 1. Site plan indicating the pool, deck, and bathhouse (for motel / hotel pools, where bathhouses are not required, indicate the location of the filter room), storm drains, topography, emergency access, etc.
- 2. Pool plans:
  - Show inlet, outlet and vacuum fittings, skimmers, diving boards, lights, ladders, guard chairs, etc.
  - Elevations of pool showing slopes and dimensions.
  - Detailed sections showing inlet fittings, drains, skimmers, lights, hydrostatic relief valves, etc.
  - Piping plans of return, vacuum and drains indicating the pipe sizes and dimensions.
  - Detailed plan and elevation of filter equipment. Include all equipment located in the filter room, and filter room piping, valves, gauges, flow-meters, hair / lint filters, pumps, etc.
  - Detailed plan and sections showing pool structural detail, coping, pool decks and drains, etc.
- 3. Pool/spa decks including material specifications, finish, drains, slopes, etc.
- 4. Details of bathhouse plans shall include the following: floor plan; elevations; plumbing, electrical and mechanical plans; floor slope; typical sections; lighting; finish schedule, etc.

#### 5. SPECIFICATIONS:

Manufacture's specifications:

- 1. Pool-filter system equipment, including pump curves.
- 2. Plumbing fixtures, including anti-scalding device and hot water heater for showers.
- 3. Lighting for bathhouse, filter room, deck, etc.
- 4. Fencing and gates, including clearance above deck, section details, height, etc.

#### **INSPECTIONS:**

Call the Health Department at least 2-3 days in advance to schedule inspections. An inspection to verify that the facility was built in accordance with approved plans is required. Also, an inspection under operating conditions to be required before a health permit is issued.

## Loudoun Health Department Swimming Pool Plan Review Notes

#### FACILITY SITE / SIGNAGE:

- 1. The swimming pool location shall not be subject to flooding.
- 2. Signs to be provided within the facility complex to direct fire/rescue to the pool.

#### DECK / FENCING / GATES / LIGHTING/ FODDSERVICE:

- 3. The pool perimeter fence to be 6 feet high.
- 4. At least one gate to be provided for the pool perimeter fence, and shall have a self-closing latch at least 4 feet above the ground.
- 5. An emergency/service gate 8 feet wide to be provided.
- 6. Pool lighting, if used after dark, shall provide at least of 10 foot candles for the pool surface area and 30 foot candles for the pool deck area measured six inches above the pool deck and water surface.
- 7. The pool deck to be at least 5 feet wide, and around the entire pool perimeter.
- 8. The deck to be concrete, non-slip, with a minimum slope of 1/48 and maximum slope of 1/24 away from pool.
- 9. The deck drainage shall create no standing water or nuisance. Roof run-off or other drainage shall not be wasted on the deck.
- 10. Foodservice facilities within pool enclosure to be separated from pool by 3-foot fence or suitable barrier.
- 11. The wading pool to be surrounded by a 4-foot wide deck. The wading pools within the main pool enclosure to be separated from the main pool by a 3-foot fence.
- 12. Grassed areas shall have a waist high shower spray at each entrance to deck.
- 13. The area around deck shall drain away from the deck.

#### **BATHHOUSE & FILTER ROOMS:**

- 14. The filter room to be impervious to water and chemicals, and a light color.
- 15. The filter room shall have at two vapor-proof lights, providing a minimum of 30 foot-candles of light.
- 16. Light fixtures in the bathhouse to be shielded.
- 17. Electrical switches/receptacles to be waterproof GFCI construction.
- 18. A telephone to be provided, with 911, and the facility name and address posted.
- 19. The filter room floor pitch to be at least 1/48, providing a dry area by the electrical panels.
- 20. The area adjacent to the filter room entrance shall drain away from entrance.
- 21. A readily accessible room to be designated and equipped for emergency care.
- 22. The floor of dressing rooms, showers, toilets and lavatories shall have a minimum pitch of 1/48 to drains with no low spots to allow standing water; floors to be non-slip.
- 23. Rooms to be ventilated so floors do not remain wet.
- 24. Showers shall have an anti-scalding device(s), and adequate hot water.
- 25. Each shower shall drain separately, and have a soap dispenser.
- 26. Pool rules to be posted in pool area, dressing rooms, and at pool entrances.
- 27. Warning signs for hazardous materials to be in the room or area where they are stored.
- 28. The filter room shall have working area and access above and around all equipment.

#### POOL EQUIPMENT \ PIPING \ PLACARDS \ DEPTH MARKERS:

- 29. Treads on ladders, steps, and step holes to be non-slip.
- 30. Underwater lighting shall provide at least one watt per square feet of water surface.
- 31. Flow rate meters to be on return piping, and be rated to operate at mid-scale.
- 32. Filter system piping shall color coded as follows: Fresh water-blue, backwash-black, influent-yellow, effluentwhite, suction equipment-orange, recirculation-green. Filter room piping to be securely anchored.
- 33. A filter room placard to be provided with the following information: name, address and date of construction of the facility, volume in gallons, water surface area in square feet, minimum turnover time in hours, minimum rate of flow in gallons per minute to provide the required turnover time, head loss at which the filters should be backwashed, maximum facility load, and maximum pool load(s).
- 34. Depth markers to be provided every one-foot of increment of depth at least every 20 feet on the pool wall and deck, with numerals and letters 5 inches high and in good contrast with pool wall and deck.
- 35. Each inlet shall have a means to adjust flow at least 50%, and to be readily controlled and accessible without special tools.
- 36. An approved water quality placard to be posted for public view.
- 37. The water test results to be legibly and conspicuously posted on a permanent, water-proof, and durable placard in a location where it is readily observable by the patrons. The most recent required daily water quality test results, including the date and time of day tested, to be posted. The minimum and maximum standards for these parameters and to be included on the placard. Water temperature shall also be posted for heated spas.

#### Instructions for Submittal of Plans and/or Other Pertinent Information.

The environmental health staff must review all plans; in order to assess compliance with local and state health codes. A checklist was developed in order to insure that important health code concerns were adequately addressed. A checklist has been provided to you so that you are aware of exactly what information has to be reviewed prior to approval. In order to expedite this process we request that you go through the checklist and direct us to where the item number can be found on plan/specifications. In the packet there is a list of acceptable health notes that can be used or written on the plans; you can use them if you wish.

## SWIMMING POOL PLAN REVIEW CHECKLIST

| Pool Name                                   |                   |                 |                 |
|---|-------------------|-----------------|-----------------|
| Address                                     |                   |                 |                 |
| Pool Types (check all that apply): 🔛 Main 🗌 | Spa 🗌 Wading 🗌    | ] Other         |                 |
| Water 🔄 Public (Municipal) 🗌 Private (Well  | ) Sewace          |                 |                 |
| Please fill out the following information:  | , <b>j</b>        | <b>(-</b> - / _ | ,, ( <b>f</b> , |
| Main: Gallons                               | Flow Rate         | GPM X 60 =      | GPH             |
| Water Surface                               | Sq ft Turnover ra | ite             | HRS             |
| # Skimmers                                  | Flow per Skimme   | r               | GPM             |
| # Returns                                   | Flow per Return   |                 | CUN             |
| Gallons / GPH = Turnover                    | /                 | =               | HRS             |
| Spa: Gallons                                | Flow Rate         | GPM X 60 =      | GPH             |
| Water Surface                               | Sq ft Turnover ra | ite             | HRS             |
| # Skimmers                                  | Flow per Skimme   |                 | GPM             |
| # Returns                                   | Flow per Return   |                 | GPM             |
| Gallons / GPH = Turnover                    | /                 | =               | HRS             |
| Wading: Gallons                             | Flow Rate         | GPM X 60 =      | GPH             |
| Water Surface                               | Sq ft Turnover ra | ite             | HRS             |
| # Skimmers                                  | Flow per Skimme   | г               | GPM             |
| # Returns                                   | Flow per Return   |                 | GPM             |
| Gallons / GPH = Turnover                    | /                 | =               | HRS             |
| Other: Gallons                              | Flow Rate         | GPM X 60 =      | GPH             |
| Water Surface                               | Sq ft Turnover ra | ite             | HRS             |
| # Skimmers                                  | Flow per Skimme   | r               | GPM             |
| # Returns                                   | Flow per Return   |                 |                 |
| Gallons / GPH = Turnover                    | /                 | =               | HRS             |
| Total Bather Load = Sq ft of water surface  |                   | / 27            |                 |

| Sq ft water surface: Main | + Spa | + Wading | = |
|---------------------------|-------|----------|---|
|                           |       |          |   |

| #  | Will   | EHS    | Code      | ltem *   | Where     |
|----|--------|--------|-----------|--|-----------|
|    | Lompiy | Keview | Number    |  | Addressed |
| 01 |        |        | X X X //I | Direct and unobstructed access to the pool area to be provided for the admission of emergency<br>and service vehicles, equipment and personnel.  |           |
| 02 |        |        | 838.46    | Pool areas enclosed by a fence, a gate opening of 2.5 meters (8 ft.) to be provided.   |           |
| 03 |        |        | 838.24    | Permanent/conspicuous signs posted showing the most direct route to an indoor/evaluated pool.  |           |
| п/ |        |        | 838.46    | Pool must be completely enclosed with an approved fence at least 6 ft high with at least one 4 ft  |           |
| 04 |        |        | 030.40    | wide self-closing latch gate at least 4 ft above ground, and an emergency/service gate 8 ft wide.  |           |
| 05 |        |        |           | Grassed areas must have a waist high shower at each entrance to the pool deck.   |           |
| 06 |        |        | 838.32    | Pool perimeters with a 100 ft or less must have at least two means of egress and one additional<br>means of egress for each additional 200 ft pool perimeter.  |           |
| 07 |        |        | 838 37    | Non-slip treads on ladders, steps, & step holes.   |           |
| 08 |        |        |           | Recessed steps have handrail.  |           |
|    |        |        | 000.01    | Pool Plans   |           |
| 09 |        |        | 070 75    |  |           |
| ٥U |        |        |           | Construction - white/light color finish, no cracks.<br>If the low used often dealer the need about how an illumination above the water surface of at least 10  |           |
| 10 |        |        |           | If to be used after dark, the pool shall have an illumination above the water surface of at least 10-<br>foot candles. The lighting to be designed and installed to prevent glare in the pool and pool area. |           |
|    |        |        | L         | Filter Room / Pump Room  |           |
|    |        |        |           | The filter room to be constructed of materials that are impervious to water and chemicals  |           |
| 11 |        |        | 838.34    | necessary for the operation of the pool.   |           |
| 12 |        |        | 838.34    | Two vapor-proof lights to be provided in filter room with a minimum of 30 foot candles.  |           |
| 13 |        |        | 838.34    | Floor slope 1/48, dry by electrical panels.  |           |
| 1/ |        |        | 838.34    | The filter room(s) to be provided with mechanical cross-ventilation and all equipment to be  |           |
| 14 |        |        | 030.34    | installed so that it is convenient to operate and repair.  |           |
| 15 |        |        | 838.34    | Door large enough for removal of all equipment, door must be able to be secured against entry  |           |
| 10 |        |        |           | by unauthorized persons.   |           |
| 16 |        |        | 0.00.04   | Drainage to be such as to avoid the entrance and accumulation of water in the vicinity of the<br>electrical equipment.   |           |
|    |        |        | I         | Filter System (Must Comply with on of the following 17 - 22)   |           |
| 17 |        |        | 838 35    | Sand – flow rate not to exceed 3 gal/min per sq ft; backwash rate to be 4 x filter rate.   |           |
| 17 |        |        |           | High Rate – flow rate not to be less than five gallons per minute per square foot of filter surface  |           |
| 18 |        |        |           | area, and not greater than twenty gallons per minute per square foot of filter surface area. The   |           |
|    |        |        |           | backwash rate of flow to be at the rate specified by the manufacturer.   |           |
| 19 |        |        |           | Diatomaceous Earth (pressure or vacuum type) - flow rate shall not exceed 1.5 gal/min per sq ft.   |           |
|    |        |        |           | Diatomaceous Earth (pressure or vacuum type with slurry feeder) - flow rate to be less than 3  |           |
| 20 |        |        | 838.35    | gals per minute per sq ft; and a backwash sump pit with a standpipe to be installed to collect   |           |
|    |        |        |           | spent diatomaceous earth so that it can be collected and disposed of with solid waste.   |           |
|    |        |        |           | Cartridge - flow rate not to exceed the design rate or a maximum of three hundred seventy-five   |           |
| 21 |        |        | 0.00.07   | thousand gallons per minute per square foot of filter surface area. Cleaning of cartridge filters  |           |
|    |        |        |           | must be in accordance with the manufacturer's recommendations. One complete extra set of   |           |
|    |        |        |           | cartridges to be available at all times to facilitate cleaning.  |           |
| 22 |        |        | 838.35    | Other filtration systems whose performance equals or exceeds those described above may be<br>used in a pool recirculation system with the approval of the Director.  |           |
| -  |        |        |           | The system shall have a flow meter on the return line to measure the flow of filtered water being  |           |
|    |        |        |           | returned to the swimming pool and a flow meter to measure the rate of backwash in sand or  |           |
| 23 |        |        | 838.35    | anthracite coal filters. The flow meter to be of fixed calibration, measure in gallons per minute,   |           |
|    |        |        |           | and be properly sized to indicate the design rate of flow at approximately mid-scale.  |           |
| 24 |        |        |           | Hair/lint strainer to be installed ahead of the filter pump designed and located so that it can be   |           |
| 24 |        |        | 000.00    | easily and simply dismantled for cleaning and inspection. An extra strainer basket to be provided.   |           |

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| 25 |           |           | 838.37   | There will be no direct connection between the pool recirculation system and the sewer or the<br>potable water supply.  |           |  |
| 70 |           |           |          | Piping color - coded as follows: Fresh water-blue, backwash-black, influent-yellow, effluent-white,   |           |  |
| 26 |           |           |          | suction equipment-orange, recirculation-green. Filter room piping to be securely anchored.  |           |  |
|    |           |           |          | Main drain outlets to be located in the deepest part of the pool and shall have a minimum of two  |           |  |
| 27 |           |           |          | interconnected main drain outlets, which cannot be isolated by valves or other means, for each<br>recirculation pump system.  |           |  |
|    |           |           |          | Main drain covers to be manufactured and installed IAW ASME/ANSI and NSF International  |           |  |
|    |           |           |          | standards for suction fittings. The cover, frame, and all components to be corrosion resistant  |           |  |
| 28 | $\square$ | $\square$ | <u></u>  | and designed to withstand the maximum anticipated forces generated by active use. The total   |           |  |
|    |           |           |          | water velocity through main drain outlets not to exceed one and one half feet per second for<br>water depths eight feet and greater or one foot per second for depths less than eight feet, and |           |  |
|    |           |           |          | shall not exceed the maximum flow rate specified by the manufacturer of the main drain cover.   |           |  |
|    |           |           |          | Light fixtures to be installed in a manner that creates no hazard to patrons or employees. All light  |           |  |
| 29 |           |           |          | fixtures prohibited directly above the water surface area or within three feet horizontally of the  |           |  |
|    |           |           |          | pool rim except as permitted by the National Electrical Code. All light fixtures to be shielded.  |           |  |
| 30 |           |           |          | In-ground pools with water depths exceeding 18 in, at least 1 hydrostatic pressure relief valve(s).   |           |  |
| 31 |           |           | <u> </u> | Underwater lighting 1 watt/sq ft water surface; GFI. (Watts per lamp X #<br>of lamps) / sq ft of water surface = watts / sq ft of water surface   |           |  |
| 32 |           |           | 838.20   | Deck 5 ft wide & around entire pool perimeter.  |           |  |
| 33 |           |           | 838.42   | Deck concrete, non-slip, slope min 1/48 & max 1/24 away from pool.  |           |  |
| 34 |           |           |          | Spa pools have continuous deck, at least 5 ft wide, extending around at least 50% of the spa pool.  |           |  |
| 35 |           | $\square$ |          | At least sixteen feet and five inches of free and unobstructed head room to be provided above   |           |  |
| 36 |           |           |          | every diving board and diving platform.<br>Diving boards must be installed In Accordance With Tables I and II of code.  |           |  |
| 90 |           |           | 030.30   | Suction Cleaners  |           |  |
| 37 |           |           | 828 / П  | Suction cleaner to be provided and connected through a hair catcher.  |           |  |
|    |           |           |          | A device(s) is to be provided for regulating the flow from the pool outlets where a suction   |           |  |
| 38 |           |           | 030.40   | cleaner is operated by the recirculation pump.  |           |  |
| 39 |           |           |          | Portable electric suction cleaners to be UL rated and connected to a GFCI protected electrical<br>outlet. Waste from a portable suction cleaner to be disposed of as solid waste.               |           |  |
|    |           |           |          | Hydraulic jet-type suction permitted if water pressure 30 psi or more, provide backflow   |           |  |
| 40 |           |           | X.XX 411 | prevention device.  |           |  |
|    |           |           |          | Gutters / Skimmers  |           |  |
| 41 |           |           |          | Overflow Gutters - when overflow gutters are used, they must comply with code.  |           |  |
| 42 | $\square$ | $\square$ | XXX 41   | Skimmers - 1 per 40 ft pool perimeter or 1 per 400 sq ft or less of pool surface spaced to  |           |  |
|    |           |           |          | provide max skimming. pool perimeter ft/# of skimmers =ft /skimmer<br>Skimmers weirs shall automatically adjust to water level 4 inches over minimum and provided                               |           |  |
| 43 |           |           | <u> </u> | with a removable basket or screen.  |           |  |
|    |           |           |          | Skimming system to be capable of continuously removing 80% or more of the re-circulated   |           |  |
| 44 |           |           |          | water and returning it to the filter. Water velocity through skimmer at least 20 GPM & less than  |           |  |
|    |           |           |          | 35 GPM GPM / # skimmers = GPM per skimmer<br>Safety and Passus Equipment  |           |  |
|    |           |           |          | Safety and Rescue Equipment<br>One or more light, but strong, non-telescopic poles with blunted ends not less than twelve feet in   |           |  |
| 45 |           |           | X < X 54 |   |           |  |
| 46 |           |           | 878 59   | One or more throwing ring buoys not less than 15 inches in diameter having a test line attached of sufficient length to reach twice the width of the pool is to be available at all times.      |           |  |
|    |           |           | 838.59   | length including a body hook.<br>One or more throwing ring buoys not less than 15 inches in diameter having a test line attached  |           |  |

| #          | Will   | EHS    | Code          | ltem *   |           |  |
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|            |        |        |               | A first aid kit that meets OSHA First Aid 29 CFR 1910.151 standards to be readily available and  |           |  |
| 47         |        |        |               | meet minimum requirements of generic first aid kits IAW the American National Standards  |           |  |
|            |        |        |               | Institute (ANSI) Z308.1 - 1978.  |           |  |
| 48         |        |        |               | A room designated for emergency care of casualties shall, at a minimum, be equipped with an<br>approved first aid kit, a cot, and two blankets. Filter or chemical storage rooms not to be used as |           |  |
| 40         |        |        |               | approved in statu kit, a cot, and two plankets. Filter or chemical storage rooms not to be used as<br>emergency care rooms.  |           |  |
|            |        |        |               | A direct dial, hard-wired telephone that is fully operational to be provided within the swimming   |           |  |
| <b>/ ח</b> |        |        |               | pool area. The phone to be immediately accessible from the pool deck. The phone to be located so   |           |  |
| 49         |        |        | 838.44        | a clear and unobstructed view of the pool(s) is provided. Emergency telephone numbers and the  |           |  |
|            |        |        |               | facility's name and address to be posted by the telephone.   |           |  |
| 50         |        |        |               | Depth markers required every one foot increment of depth and at least every 20 ft on pool wall &   |           |  |
|            |        |        |               | deck. Numbers/letters to be 5 inches high and be of good contrasting color with pool wall & deck.  |           |  |
| 51         |        |        |               | One lifeguard stand per 2000 sq ft of water surface. Additional lifeguard stands required where,   |           |  |
| ונ         |        |        |               | due to the configuration of the pool, full visibility is not provided from the installed lifeguard<br>standsq ft of water surface /# of guard chairs =sq ft/guard chair                            |           |  |
| 52         |        |        |               | Pool slope – less than 5 ft max 1 – 12 other than wading pools, greater than 5 ft 1 - 3.   |           |  |
| 53         |        |        |               | Pool inlets in walls not spaced more than 20 ft on center around perimeter.  |           |  |
|            |        |        |               | Inlets in the pool bottom are to be located to ensure proper distribution. The # inlets = perimeter  |           |  |
| 54         |        |        | <b>A 1A 1</b> | of pool in feet / by 20. Perimeter ft / 20 = # inlets  |           |  |
| 55         |        |        |               | All wall inlets, except makeup water inlets, wading pool inlets and prefabricated gutters with 45  |           |  |
| JJ         |        |        | 030.33        | degree angle inlets in the bottom are to be at least fifteen inches below the operating water level.   |           |  |
| 56         |        |        | X (X (4       | Each inlet to be provided with a means of adjusting flow through a range of at least fifty percent   |           |  |
|            |        |        |               | of its design capacity. Inlet flow controls to be readily accessible.  |           |  |
|            |        |        |               | Showers / Water Closets / Lavatories / Solid Waste Storage   |           |  |
| 57         |        |        | 0.30 117      | All water recreation and interactive water feature facilities shall provide bathhouse facilities.<br>Motels and similar establishments that restrict pool use to guests only are not required.     |           |  |
|            |        |        |               | The bathhouse to be located so that patrons pass through the rooms containing the dressing   |           |  |
| 58         |        |        | 0.30 11.3     | areas, showers and toilet fixtures prior to accessing the pool.  |           |  |
| 59         |        |        | 838.116       | One shower per each forty persons or fraction thereof to be provided based on max facility load.   |           |  |
| 60         |        |        |               | Bathhouse will have a separate exit opening directly to the swimming pool, spa pool, or water  |           |  |
| OU         |        |        | 030.113       | park deck. The exit shall not be near the deep portion when the pool depth is greater than 5 ft.   |           |  |
| 61         |        |        |               | Floors of dressing rooms, showers, toilets and lavatories are to be non-slip, have a minimum   |           |  |
| _          |        |        |               | pitch of 1 - 48 to drains with no low spots to allow standing water and mechanically ventilated.   |           |  |
| 62         |        |        |               | Separate dressing rooms to be provided for each sex. Lockers, baskets, hooks or other sanitary<br>means for clothing/personal accessories to be provided. Dressing rooms to be maintained in       |           |  |
| UZ         |        |        |               | clean and sanitary conditions. Clothing hooks shall not present a puncture hazard to patrons.  |           |  |
|            |        |        |               | Each shower to supply adequate quantity of heated water through an anti-scald device. Hot water  |           |  |
| 63         |        |        |               | at the nozzle head not to exceed 110 degrees Fahrenheit or less than 90 degrees Fahrenheit.  |           |  |
|            | [      |        |               | Water from each shower will drain separately or each shower to be located and have the floor   |           |  |
| 64         |        |        |               | sloped so that waste from one shower will not flow over the floor serving another. Each shower   |           |  |
|            |        |        |               | fixture to be provided with a liquid soap dispenser and an adequate supply of liquid soap.   |           |  |
| 65         |        |        |               | Toilets to be provided in proportion required by the International Plumbing Code.  |           |  |
| C u        |        |        |               | Spectators at swimming, diving or other special events shall not have access to the pool and   |           |  |
| 66         |        |        |               | separated from the portions of the pool area used by swimmers or divers. Spectator balconies<br>shall not overhang within five feet of any portion of the pool water surface.                      |           |  |
|            |        |        |               | Food service area to be at least ten feet from the swimming pool edge and to be enclosed by a  |           |  |
| 67         |        |        |               | fence or suitable barrier. Glass containers are not permitted in the pool area.  |           |  |

| #            | Will<br>Comply     | EHS<br>Review | Code<br>Number | ltem *  | Where<br>Addressed |  |
|--------------|--------------------|---------------|----------------|---|--------------------|--|
| Wading Pools |                    |               |                |   |                    |  |
| 68           |                    |               | 838.49         | The bottom slope of any wading pool not to be greater than 1 - 15 and not less than 1 - 40.   |                    |  |
| 69           |                    |               | 838.42         | Wading pools to be entirely surrounded by a deck at least four feet in width.   |                    |  |
| 70           |                    |               | X < X /14      | Wading pools to be separated from any other swimming pool or spa pool by a fence to be at least<br>three feet in height with a latching, self-closing, and three-foot gate.   |                    |  |
| 71           |                    |               | 838.49         | A separate recirculation system to be provided exclusively for the wading pool.   |                    |  |
|              |                    |               |                | Disinfection Equipment  |                    |  |
| 72           |                    |               |                | NSF or Director approved mechanically operated, positive displacement or other disinfectant<br>feeding equipment.   |                    |  |
| 73           |                    |               | 838.45         | Capable of supplying an amount equivalent to maintain at least 1 ppm free chlorine or 2 ppm<br>bromine throughout the swimming pool at all times of operation as well as capable of supplying<br>an amount up to 10 ppm chlorine or 20 ppm bromine.   |                    |  |
| 74           |                    |               |                | Minimum Protective Equipment to include goggles or full-face shields, neoprene rubber gloves,<br>and rubber aprons to be provided and used by personnel handling hazardous chemicals.   |                    |  |
| 75           |                    |               | 838.63         | An approved water quality test kit for determining free and total chlorine or total bromine<br>residuals, pH, total alkalinity, and calcium hardness to be provided and maintained. Provisions to<br>be made for checking super chlorination levels.  |                    |  |
| 76           |                    |               | 838.54         | Areas restricted to operating personnel only to be prominently identified with a permanent,<br>legible placard stating "Authorized Personnel Only" including but not limited to the filter and<br>chemical storage rooms. The placards to be conspicuously located on the exterior of the doors to<br>the restricted areas. |                    |  |
|              | Other Requirements |               |                |   |                    |  |
| 77           |                    |               | 838.92         | Spa pool water temperature shall not exceed 104 degrees Fahrenheit. A thermostat secured<br>from unauthorized adjustment by lock and key to be provided. Impact resistant spa pool<br>thermometer to be kept in each spa pool for measuring water temperature.  |                    |  |
| 78           |                    |               | X ( X / X      | Each swimming facility shall have at least one drinking fountain readily accessible to all patrons<br>within the pool area.   |                    |  |

## \* Show or note each item where appropriate on accompanying plans

 Responsible Agent Signature

 Responsible Agent Name

 Date

| Filter Room Placard       |        |  |  |  |  |  |
|---------------------------|--------|--|--|--|--|--|
| Main                      |        |  |  |  |  |  |
| Pool Name                 |        |  |  |  |  |  |
| Pool Address              |        |  |  |  |  |  |
| Date of Construction      |        |  |  |  |  |  |
| Volume (gal)              |        |  |  |  |  |  |
| Water Surface (square ft) |        |  |  |  |  |  |
| Minimum Turnover (hours)  |        |  |  |  |  |  |
| Minimum Flow Rate (GPM)   |        |  |  |  |  |  |
| Maximum Pool Load         |        |  |  |  |  |  |
|                           | Spa    |  |  |  |  |  |
| Date of Construction      |        |  |  |  |  |  |
| Volume (gal)              |        |  |  |  |  |  |
| Water Surface (square ft) |        |  |  |  |  |  |
| Minimum Turnover (hours)  |        |  |  |  |  |  |
| Minimum Flow Rate (GPM)   |        |  |  |  |  |  |
| Maximum Pool Load         |        |  |  |  |  |  |
|                           | Wading |  |  |  |  |  |
| Date of Construction      |        |  |  |  |  |  |
| Volume (gal)              |        |  |  |  |  |  |
| Water Surface (square ft) |        |  |  |  |  |  |
| Minimum Turnover (hours)  |        |  |  |  |  |  |
| Minimum Flow Rate (GPM)   |        |  |  |  |  |  |
| Maximum Pool Load         |        |  |  |  |  |  |
| Total Facility Load       |        |  |  |  |  |  |

| COUNTY OF          |        | Loudoun County Health Department<br>P.O. Box 7000<br><sup>1</sup> Harrison Street Southeast<br>Leesburg VA 20177-7000<br>Application for a Plan Review |  |
|--------------------|--------|--|--|
|                    |        | Swimming Pool/Spa Interactive Water Feature  |  |
|                    |        | New Remodel Change of Ownership  |  |
| Facility Name      | 2      |  |  |
| Facility Addre     | ess    | Suite  |  |
| Facility City      |        | Zip  |  |
| Ownership In       | ıforma | ation:   |  |
| Legal Owner        | Name   |  |  |
| Address            |        |  |  |
| Contact            | Work   | CellE-Mail   |  |
| Name               |        | Authorized Contact Responsible for Plan Review Submittal   |  |
| Address<br>Contact | Work   | CellE-Mail   |  |
| Signature          |        |  |  |
| Print Name         |        | Date   |  |

Fee: \$92 Cash or Checks Payable to County of Loudoun