



Spray Feature Plan Detail

Items to Include in the Plans

Spray Feature Dimensions and Surfacing Material

- Length
- Width
- Type of surface material
- All decks, locker rooms, and walkways to and from the spray feature including walking surfaces within the feature sloped to drains
- Surface is non-slip
- Type of surfacing material used
- Materials easy to clean, fast drying and water-sealed

Note: This plan detail doesn't yet include additional requirements needed to comply with the new federal law, the *Virginia Graeme Baker Pool and Spa Safety Act*. For guidance, see www.doh.wa.gov/ehp/wr/rules.htm.

Dimensions of Walking Surfaces

- Width of walking surface beyond the spray feature itself
- Review of potential spray drift to ensure walking surfaces extend adequately to catch spray

Spray Feature Water

- Approved potable source of water
- Water disposed in a manner approved by local authorities or the state department of health

Inlets and Outlets and Make-up Water

- Inlet sprays designed and maintained so that they do not inflict physical damage to the bathers
- Evaluation force of the spray nozzle:
 - Gallons per minute flow
 - Size of opening at nozzles
 - Amount of pressure at the nozzle
 - Velocity, pressure, and total force in proximity to bathers' eyes and other sensitive body parts
- Outlets designed and maintained with sufficient capacity to prohibit water accumulation in the spray feature
- Two or more drains
- Openings do not allow passage of a half sphere
- Grates properly secured to prevent removal
- Grates strong enough to withstand anticipated loadings
- Where grates recirculating to a pump:
 - Drains spaced 3 feet apart
 - Drains sized to handle a maximum flow of 1.5 feet per second at full recirculation rate
 - Drains sized to prevent suction hazard

Recirculating Spray Pools

- If water is recirculated and treated, [comply with treatment requirements in 246-260-031] and provide a minimum 30 minutes turnover treatment rate
- Design provides for routine draining of the water in the holding tank for the spray feature. Volume of spray feature adequate to require replenishment spray feature holding tank less than twice a week
- Provide details to ensure when the holding tank is emptied it is safely accessible for operators to clean and remove oils and dirt and to disinfect tank

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- Draining and cleaning requirements calculated by spray pool reservoir volume in gallons/3/average daily use. Volume in gallons/3 divided by 200 = 4 days. Minimum volume needed for draining every four days with 200 people average/day would be 2400 gallons
- Note how fresh water will be added to the spray feature reservoir when it is recirculating
- Protections to prevent back pressure or back siphonage
- Size of the fresh water makeup in relation to anticipated daily needs

Valves, Strainer Basket, and Pump

- Identify valve placement in the design
- Flow control from the overflow and the main drain system assures at least 60 percent of the flow comes from the overflow system
- Note design flow of the pump in relation to the overall range of flows with the filter clean and with the filter dirty
- Provide estimated range of flows determined by the design (hydraulic calculations welcome)

Turnover Rate, Filter, Disinfection Equipment, and other Chemical Feeding Equipment

- Provide turnover rate
- Turnover rate to meet the minimum turnover requirement when filter is dirty
- GPM/SF rate of flow with filter clean and dirty
- Filter and disinfection equipment listed to NSF 50 or equal
- Equipment sized to ensure it meets anticipated peak flows and demands and average demands
- If using cartridge filters, specify an extra set of cartridges
- When recirculation pump is turned off, controls for feeding disinfectant and other chemical feeding equipment for controlling pH also turns off (describe how this is accomplished)
- If using supplemental disinfectants e.g. ozone, copper/silver, or uV, please contact the office to ensure that they correctly used

Mechanical Equipment and Chemical Storage

- Adequate space provided for access to equipment for routine maintenance and use
- All gauges and flow meters located so they can be easily read and provide accurate readings
- All chemicals stored in a separate room or according to the manufacturer's requirements
- Mechanical room:
 - Enclosed
 - Locked
 - Well ventilated
 - Sloped to drain
 - Lighted sufficient for equipment maintenance and reading of meters and gauges

Locker Rooms and Plumbing Fixtures

- Plumbing fixtures; toilets, urinals, showers, sinks, hose bibs, diaper changing stations, drinking fountains and janitor sinks; conform with applicable requirements
- Locker room designed to minimize cross traffic between persons in street shoes and those in bare-feet

Mechanical Ventilation

- Adequate space provided for access to equipment and for maintenance and use
- Gauges and flow meters placed where they may be easily read
- Chemicals stored in a separate room or area in accordance with manufacturer's requirements
- Mechanical room includes:
 - Enclosed, locked well ventilated room
 - Sloped floor to prevent standing water
 - Lighting to ensure that gauges may be easily read

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Lighting – Outdoor Spray Features

- Pools used after dusk meet minimum lighting conditions of 10 foot candles on the decks and pool surface
- Pool closed before dusk
 - Letter from the owner provided

Lighting - Indoor Spray Features

- Meets minimum standards for indoor pools of 30 foot candles on pool surfaces, 10 foot candles on pool decks
- Lights have protective covers
- The direction of natural light from windows and potential for glare problems from sunlight considered

For more information, contact the Washington State Department of Health Water Recreation Program at www.doh.wa.gov/ehp/wr/contact.htm.