A-33: Swimming Pool and Spa Cleaning and Maintenance

Stormwater runoff (rainwater and snow melt) is the largest source of pollution to our lakes, streams and Puget Sound. King County requires businesses to implement measures to protect our shared waters. If the requirements below do not prevent pollution, additional measures are necessary.

The following best management practices (BMPs) apply to pools, spas, hot tubs, and fountains that use chemicals and/or that are heated.

Required Operational BMPs

- Clean the pool, spa, hot tub, or fountain regularly, maintain proper chlorine levels and maintain water filtration and circulation. Doing so will limit the need to drain the facility.
- Manage pH and water hardness to reduce copper pipe corrosion that can stain the facility and pollute receiving waters.
- Before using copper algaecides, try less toxic alternatives. Only use copper algaecides if the other alternatives do not work. Ask a pool/spa/hot tub/fountain maintenance service or store for help resolving persistent algae problems without using copper algaecides.
- Develop and regularly update a facility maintenance plan that follows all discharge requirements.
- Dispose of unwanted chemicals properly. Many of them are hazardous wastes when discarded.
- Store pool chemicals under cover and in enclosed containers.

Required Water Disposal BMPs

- All pools and spas regulated by Public Health-Seattle and King County must be connected to the sanitary sewer for draining pool water, pool wash water and filter backwash. If the pool or spa does not have a permanent drain connection, then water must be pumped or drained to the sanitary sewer or meet the following BMPs.
- Discharging pool and spa water if sanitary sewer is not available:
    - Non-saltwater and saltwater pool and spa water
        - Have it hauled off-site for disposal at an approved location; or
        - Infiltrate to ground if all 9 conditions below are met. Saltwater pool and spa water must not be allowed to flow off-site, nor may it enter stormwater drainage systems or surface waters. Saltwater discharges can elevate salt concentrations in your soil and damage vegetation.
    - Non-saltwater pools and spas only
        - Drain to the stormwater drainage system if all 9 conditions listed below are met

- Conditions for draining to ground (non-saltwater and saltwater pools and spas) or to a stormwater drainage system (non-saltwater pools and spas only):

  1. No copper-based algaecides were used;

  2. The water must be tested to determine chlorine levels and pH;

  3. The water is dechlorinated/debrominated to 0.10 parts per million (ppm) or less, using neutralizing chemicals or by letting the pool or spa "sit" long enough to reduce the level to the allowable limit. The pool or spa must not be used during this period;

  4. The pH is neutral (6-8);

  5. Free of any coloration, dirt, suds, or algae;

  6. Free of any filter media;

  7. Free of acid cleaning wastes;

  8. Released at a rate that does not cause erosion either onsite or in the drainage system; and

  9. At ambient temperature.

- Saltwater pool and spa water must not be discharged to the stormwater drainage system. Either infiltrate to ground if all 9 conditions above are met or hire a professional pool-draining service to collect all water for off-site disposal at an approved location.
- Diatomaceous earth (commonly used as a filtering agent) and water from back flushing filter systems cannot be discharged to surface waters, storm drainage systems, septic systems, or the ground. Dispose of diatomaceous earth filter material as solid waste.
- Do not discharge pool or spa water to a septic system, as it is prohibited and may cause the system to fail.
- The discharge of pool and spa filter backwash or cleaning water to the ground, surface waters or the storm drainage system is not allowed.

Additional Information

- Potential pollutants can include: fecal coliform bacteria, nutrients, oxygen demanding substances, pH, and sediment.
- *Stormwater Pollution Prevention Manual*, Chapter 3: Commercial and Multifamily BMPs
  - A-3: Storage of Liquid Materials in Portable Containers
  - A-11: Cleaning or Washing of Tools and Equipment
  - A-15: Washing of Buildings, Rooftops, and Other Large Surfaces

For more information or assistance contact the King County Stormwater Services at 206–477–4811 and visit kingcounty.gov/stormwater.