Swimming Pool Maintenance

Information Packet

City of Austin
Founded by Congress, Republic of Texas, 1839
Watershed Protection Department
P.O. Box 1088, Austin, Texas 78767

Dear Pool Owner, Operator or Contractor:

This packet was compiled by the City of Austin Watershed Protection Department to assist the swimming pool service industry in complying with local, state, and federal environmental regulations.

The rules begin with federal requirements. Section 301 of The Clean Water Act prohibits a direct discharge of pollutants into the waters of the United States without a permit from the U.S. Environmental Protection Agency (EPA). It mandates that all cities in the United States with a population greater than 100,000 have a National Pollutant Discharge Elimination System (NPDES) Stormwater Permit to operate their municipal storm sewer systems.

One of the key elements of this permit requires each city to have and enforce an ordinance that bans certain pollutant discharges to the storm sewer. Title VI of the City of Austin's water quality code fulfills this requirement and contains specific pollutant discharge prohibitions. Filter backwash water, chlorinated pool water and saltwater discharged during swimming pool operation and maintenance activities are some of the many discharges prohibited because they contain pollutants such as dissolved solids, suspended solids, chlorides, and abnormal pH. These pollutants can clog fish gills, reduce fish growth rates and their resistance to disease, and cause acute and chronic effects to many species of aquatic life that may result in mortality.

It is illegal to discharge filter backwash water, chlorinated pool water or saltwater from saline pools into a storm drainage system or into a city street that drains to a storm sewer inlet. Doing this may lead to prosecution, resulting in fines and/or jail. Remember **anything** that enters a storm drain goes to our creeks and lakes. Please keep this information in mind when planning to install or maintain a pool.

You will find more detailed information concerning "Best Management Practices" to use during swimming pool maintenance activities within this packet. The City of Austin is committed to assisting businesses in understanding compliance with environmental regulations. Please feel free to share this information with pool owners, as well as other pool professionals. Should you have any questions, feel free to call us at 512/974-2550.

City of Austin WATERSHED PROTECTION
Pollution Prevention and Reduction Office
Watershed Protection Dept.
P.O. Box 1088
Austin, TX 78767
24-Hour Pollution Hotline (512) 974-2550

Austin WATER
Austin Water Utility
Special Services Division
3907 S. Industrial Drive, Suite 100
Austin, TX 78744-1070
Office (512) 972-1060 or
24-Hour Pager (512) 802-8919

Swimming Pool Backwash and Drainage Water Disposal Options

Swimming pool filter backwash, chlorinated, or salt laden pool water may not be discharged to a storm sewer system or waterway per Federal, State, and City stormwater regulations.

Pool filter backwash disposal options:

- **To a vegetated area on the pool owners property.**
  1) The area should be large enough to contain the discharge without any subsequent runoff or negatively affecting neighboring properties.
  2) Care should be taken not to create puddles of standing water, which could potentially provide breeding grounds for mosquitoes.
  3) Use caution when backwashing diatomaceous earth (DE) filter material as it will harden to cement-like consistency over time possibly damaging soil and vegetation.
  4) Saline pool backwash water can significantly impact vegetation and soils due to the high salt content.
  5) High chlorine levels in backwash water can harm certain sensitive plants.
  6) If you are located in the Edwards Aquifer recharge zone, contact the Texas Commission on Environmental Quality (TCEQ) at (512) 339-2929 prior to discharge.

- **The sanitary sewer system with prior approval from the Special Services Division of the Austin Water Utility.**
  1) The customer must apply for *and receive* a discharge permit or other written authorization to discharge from the Austin Water Utility's Special Services Division. Call (512) 972-1060 prior to discharge.
  2) The customer must determine and use an appropriate discharge flow rate to avoid any back-ups or overflows in the sanitary sewer system.
  3) The customer must prevent the discharge of soil, sediment, rock, debris or other solid material during the discharge.

- **For smaller pools, consider the use of a closed loop cartridge filter system, which does not require backwashing.**

Note: Pool backwash water is strictly prohibited from discharge to the storm sewer system or waterway per Federal, State, and City stormwater regulations.

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Chlorinated pool water disposal options:

- **To a vegetated area on the pool owners property**
  1) The area should be large enough to contain the discharge without any subsequent runoff or negatively effecting neighboring properties.
  2) Care should be taken not to create puddles of standing water, which could potentially provide breeding grounds for mosquitoes
  3) It is suggested that the pool water be dechlorinated to avoid damage to vegetation. This can be done by letting it sit for a sufficient period of time before discharging it. A home pool test kit (chlorine/pH) can help determine presence/absence of chlorine prior to discharge.

- **To the storm sewer system if the following conditions are met:**
  1) The discharge meets the following requirements:
     - The chlorine residual is less than 0.05mg/L.
     - The pH is between 6.0 and 10.5.
     - The water is clear (no algae, sediments or other pollutants).
     - The pool is **not** a saltwater swimming pool.

- **The sanitary sewer system with prior approval from the Special Services Division of the Austin Water Utility.**
  4) The customer must apply for *and receive* a discharge permit or other written authorization to discharge from the Austin Water Utility's Special Services Division. Call (512) 972-1060 prior to discharge.
  5) The customer must determine and use an appropriate discharge flow rate to avoid any back-ups or overflows in the sanitary sewer system.
  6) The customer must prevent the discharge of soil, sediment, rock, debris or other solid material during the discharge.

Note: These requirements are located in Title VI, Chapter 6-5 (Water Quality), Article 5 (Discharges into Storm Sewers or Watercourses) and Title XV, Chapter 15-10 (Wastewater Regulations) of the City Code. Large swimming pool operators (municipal, neighborhood, institutional) may be required to provide additional test results that are conducted by a certified laboratory when discharging to the storm sewer system.

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Saline (saltwater) swimming pool water disposal options:

- **To a vegetated area on the pools owners property.**
  1) The area should be large enough to contain the discharge without any subsequent runoff or negatively effecting neighboring properties.
  2) Care should be taken not to create puddles of standing water, which could potentially provide breeding grounds for mosquitoes.
  3) Discharging saltwater to landscape can significantly damage vegetation and soils due to the high salt content.

- **The sanitary sewer system with prior approval from the Special Services Division of the Austin Water Utility.**
  7) The customer must apply for *and receive* a discharge permit or other written authorization to discharge from the Austin Water Utility's Special Services Division. Call (512) 972-1060 prior to discharge.
  8) The customer must determine and use an appropriate discharge flow rate to avoid any back-ups or overflows in the sanitary sewer system.
  9) The customer must prevent the discharge of soil, sediment, rock, debris or other solid material during the discharge.

The Bottom Line:

Improper swimming pool maintenance can result in impacts to local creeks, lakes and aquatic life, and may be costly. An unauthorized discharge is a violation of City Code, is considered a Class C Misdemeanor, and is punishable with a fine of up to $2,000 per day per violation. It can also be costly to clean up pollutants from the ground, a storm drain or waterway. So, please help preserve Austin's valuable water resources by conducting appropriate pool installation and maintenance. For additional information, please feel free to contact the resources listed below.

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Important Phone Numbers:

- **The Special Services Division of the Austin Water Utility**
  Regulates discharges to the sanitary sewer system under Chapter 15-10 of Austin City Code.
  Office (512) 972-1060 or 24-Hour Pager (512) 802-8919

- **The Pollution Prevention and Reduction Section of the Watershed Protection Department**
  Regulates discharges to the storm sewer system and waterways under Title VI, Chapter 6-5 of Austin City Code
  24-Hour Pollution Hotline (512) 974-2550

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Definitions

Backwash water
Water generated by the process of cleaning your swimming pools filter by a method of reversing the flow of water

Chlorine residual
The amount of chlorine remaining in the water after application at some prior time.

Drainage water
Water (in any amount) from emptying the contents of a swimming pool.

Edwards Aquifer Recharge Zone
A 1,250 square mile area where highly faulted and fractured Edwards limestone outcrop at the land surface, allowing large quantities of water to flow into the Aquifer. Additional information on the boundaries of the recharge zone can be found by visiting the TCEQ's Edwards Aquifer Protection Program website at www.tceq.state.tx.us/compliance/field_ops/eapp/program.

pH
A measure of the acidity or alkalinity of a solution, numerically equal to 7 for neutral solutions, increasing with increasing alkalinity and decreasing with increasing acidity. The pH scale commonly in use ranges from 0 to 14.

Saline (saltwater) pool
A swimming pool that utilizes dissolved salt, through a process of electrolysis, for disinfection.

Sanitary sewer
A pipe or conduit owned, controlled, or subject to the jurisdiction of the City, designed to collect and transport wastewater.

Storm sewer
A network of pipes and channels carrying storm and surface water to surface water bodies such as streams and lakes.