

How to Empty Your Swimming Pool or Spa Wisely

The chlorine in your pool or spa provides benefits, but must be handled wisely.

Chlorine is one of the most common chemical additives used to control bacterial growth in swimming pools. With proper chlorination, swimmers can allow pool water to contact the skin and incidentally swallow some pool water with little fear of infection.

As beneficial as chlorine can be in controlled situations, its release into the environment is damaging.

Even small concentrations of chlorine can harm aquatic life. Chlorine can be very toxic to fish, small crustaceans, and plankton. 1mg/L or less chlorine has a high acute toxicity to aquatic organisms (US EPA). The federal Clean Water Act prohibits the discharge of pollutants to the waters of New York.

The municipal separate storm sewer system, or MS4, was designed to handle runoff from rain and snow only. The MS4 pipes water directly into receiving rivers and streams. If this water contains chlorine, it can kill aquatic life.

Swimming pool water can be discharged into a sanitary sewer system safely. De-chlorinate pool water before discharging into a sanitary sewer line if chlorine in the pool water is reduced to undetectable levels (<0.1 mg/L) before draining.

Options for removing chlorine:

- Simply stop adding chlorine to your uncovered pool and wait. Sunlight will help to naturally dissipate the chlorine within 10 days.

During that time, use a swimming pool test kit to measure chlorine and pH (should range between 6.5 and 8.5)

- Chemically de-chlorinate the pool water. Chemicals that will quickly remove chlorine are available through pool and spa care vendors.

A pool test kit will help you to monitor chlorine. Follow the chemical use, handling, and storage instructions carefully, as some de-chlorination products can become dangerous when brought into contact with other pool maintenance chemicals. Discharge de-chlorinated pool water to a sanitary sewer system if possible.

Unless your swimming pool is directly connected to the sanitary sewer for easy drainage, use a pump and hose to drain pool water into plumbing fixtures connected to the city sanitary sewer system.

Seek the advice of a licensed plumber concerning the appropriate flow rate for pumping water into the plumbing fixtures. Be prepared to call a plumber immediately if draining the pool causes a back up to the sanitary sewer system.

Do not discharge pool water to a private septic system. Hydraulic overloading may permanently damage the absorption field.

If pool or spa water must be discharged into a storm drain, road ditch or on to the surface of the ground, these guidelines should be followed:

- The residual chlorine should not exceed 0.1 mg/l (parts per million);
- The pH is between 6.5 and 8.5;
- The water is free of any unusual coloration;
- There is no discharge of filter media
- There is no discharge of acid cleaning wastes
- The discharge will not cause erosion
- The discharge will not cause transport of pollutants such as: motor oil; pet waste; trash and other debris into the storm drain system.

Low flow speeds will help to reduce erosive problems. If discharging into a road ditch, direct into the lowest part of the ditch, preferably into rock or rip-rap. If discharging onto a lawn or field, discharge onto a firm, level surface where water can spread out slowly and evenly. Discharging the water over the course of a few days will reduce erosion potential.

Remember that residual chlorine will kill plants – including lawn turf.



Stormwater - Why Should You Care?

Stormwater is precipitation – rain or snowmelt – that falls on a land area and flows to a water body. As it flows, it picks up material from the land surface and carries it to the lake or stream.

Litter, large debris and sediment are readily visible. Other contaminants are present, but not as easily seen: lawn and agricultural chemicals, fertilizers, pathogens, dissolved fecal materials, petroleum products and other undesirable materials can be carried in stormwater.

Every stream, storm drain and road ditch within the watershed area carries stormwater and its contents.

Polluted stormwater causes significant problems.

- The cost of treating drinking water for human consumption rises.
- Bacteria and pathogens cause beach closures.
- Excess nutrients spur aquatic weed growth. Weed harvesting costs rise.
- Excess nutrients spur algae growth. Oxygen depletion results when algae dies and decomposes, harming fish and other aquatic life.
- Household hazardous wastes poison aquatic life.
- Sediment covers fish spawning areas
- Debris washed into the water can choke, suffocate or disable aquatic life – fish, turtles, birds, amphibians.

The Ontario-Wayne Stormwater Coalition Members

Town of Victor
Town of Farmington
Town of Macedon
Town of Ontario
Town of Walworth
Village of Victor
Village of Macedon
Wayne County Highway Department
Ontario County Highway Department



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References:
USEPA
City of Corona, CA
Green DC, Washington DC



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