



# MAINTENANCE TIPS FOR POOLS, SPAS, AND FOUNTAINS



## DID YOU KNOW...?

- **Copper is a water quality problem in our creeks and in the Bay.** It is a pollutant that is highly toxic to most aquatic species, and even in small amounts, can adversely affect fish, invertebrates, plants, and amphibians.
- **Copper does not biodegrade.** It can accumulate in pools, spas, and fountains treated with copper algaecides, or where copper pipes are used for pool plumbing and heating.
- **Draining pools, spas, and fountains to storm drains can pollute our creeks and the Bay** as water flows directly into local waterways without treatment. Discharge should be directed to sanitary sewer drains.
- **Most water pollution control plants can remove some, but not all copper during treatment.** It is essential to reduce or eliminate the use of copper in pools, spas and fountains to protect our waterways.
- **A permit may be required prior to discharging your pool water, including back-**

**wash.** To learn more, go to [baywise.org](http://baywise.org) or call 1-888-baywise (1-888-229-9473).

## WHAT CAN YOU DO TO KEEP COPPER OUT OF LOCAL WATERWAYS?

1. **Prevent algae problems.** Clean regularly and maintain proper water chemistry, filtration, and circulation. Keep chlorine levels at around 2-3 ppm. Brush pool surfaces frequently. Test water frequently and adjust pH, total alkalinity, hardness and dissolved solid levels as recommended by your pool manufacturer. These steps are especially important during warm weather and/or heavy pool usage. Managing pH and water hardness minimizes corrosion of copper pipes, while minimizing algae buildup prevents the need for toxic algaecides.
2. **Use non-copper based algaecides.** Alternatives include polymeric algaecides, sodium bromide, chlorine, chlorine enhancers, and hypochlorite containing shock treatments. To increase effectiveness, include a vigorous brushing of pool walls and 24-hour filtering to control algal growth. Check with your pool maintenance or chemical supplier for additional alternatives.

3. **Drain water properly.** Keep pool, spa, and fountain water out of storm drains, gutters, and streets. Water can usually be discharged to a sanitary sewer cleanout, if:

- Water is allowed to sit for at least five days to allow chlorine to dissipate (check with local sewer wastewater authority);
- Water is copper free and between 6 and 9 pH units (check with your local wastewater authority as these are typical limits only). Otherwise, water must be appropriately pretreated before discharge. Test strips for copper and pH can easily be obtained through a pool maintenance provider;
- Acid cleaning wastes are pH neutralized before discharge;
- Backwash liquid from filters is routed through a solids separator before discharge;
- Diatomaceous earth, other filter media and solids are disposed of in the trash;
- Rain has not occurred within the past 24 hours, and will not occur within the next 24 hours; and
- Discharge does not exceed the maximum allowable flow rate of your local wastewater treatment plant. Be sure to call



Choose less toxic products for your home and garden. Look for this symbol before you buy.



your local water pollution control plant to confirm this. Your local water pollution control plant can also provide assistance in locating a sanitary sewer cleanout, as well as guidance on pretreatment measures, flow rate restrictions, backflow prevention, and how to handle special cleaning waste.

#### 4. Additional cleanup measures.

Place drip pans or buckets beneath drain pipe connections to catch leaks. Always have spill cleanup materials readily available and in a known location. Clean up spills immediately, using dry methods if possible. Dry method examples include absorbent pads and kitty

litter, which can quickly soak up spills and be swept up and/or disposed of afterwards.

5. Properly dispose of spill cleanup materials, as well as pool care products such as copper algacides. Drop off unwanted pool chemicals and containers at a local hazardous waste collection center. Do not discard pool chemicals with regular household trash and do not pour down the drain.

#### And remember —

The way you maintain your swimming pool, spa, or fountain can make a significant difference in the water quality of our creeks and the Bay.

## PESTICIDES AND WATER POLLUTION

Common household pesticides show up in treated wastewater and in local waterways, sometimes at levels that can harm sensitive aquatic life. So, water pollution prevention agencies have teamed up with participating retail stores, pesticide distributors, and manufacturers to reduce the risks associated with pesticide use. This fact sheet is part of a series of fact sheets and store displays aimed at educating residents about less-toxic pest management. For the rest of the series of fact sheets, visit [www.ourwaterourworld.org](http://www.ourwaterourworld.org). Also, look for the “Our Water Our World” logo next to products in participating stores and nurseries. See the Pesticides and Water Pollution fact sheet for information on active ingredients in common pesticides that may cause water quality problems.

Pest control strategies and methods described in this publication are consistent with integrated pest management (IPM) concepts, and are based on scientific studies and tests in actual home and garden settings. **Use suggested products according to label directions and dispose of unwanted or leftover pesticides at a household hazardous waste collection facility or event.** For more information on pesticide disposal, call 1-800-CLEANUP or visit: [www.1800CLEANUP.org](http://www.1800CLEANUP.org). No endorsement of specific brand name products is intended, nor is criticism implied of similar products that are not mentioned.

### ACKNOWLEDGMENT

The Central Contra Costa Sanitary District originally developed this IPM outreach program.

### FOR MORE INFORMATION

For more information, contact:

**BayWise**

[www.baywise.org](http://www.baywise.org)

**Bio-Integral Resource Center (BIRC)**

(510) 524-2567; [www.birc.org](http://www.birc.org)

**University of California Cooperative Extension Master Gardeners** in your area (in the phone book)

**University of California IPM website**

[www.ipm.ucdavis.edu](http://www.ipm.ucdavis.edu)

