

# SAFEGUARD CORAL REEFS

## Best Management Practices for Pollution Prevention When Backwashing Pools & Hot Tubs

### Problem

Water discharged from swimming pools and hot tubs may contain elevated levels of the disinfectant chemicals chlorine or bromine. When these chemicals travel from pools to the ocean, they are harmful to marine life. Even small amounts can cause chemical burns and stress to fish and invertebrates. There are thousands of swimming pools throughout the State of Hawai'i, with many located along the coast. When discharging pool water, pool owners and operators should follow best management practices to avoid harming coral reefs and other marine life.

### Solution

Before discharging pool water, follow these important steps:

#### Step 1: Neutralize pool water

Allow chlorine or bromine to neutralize by waiting at least 48 hours from the last addition of these chemicals. If you need to drain the pool quickly and cannot wait, chlorine-neutralizing chemicals such as sodium thiosulfate are available at your local pool supply store. Follow manufacturer instructions carefully.

#### Step 2: Test the water

Use a pool test kit to ensure there are no detectable levels of chlorine or bromine present in the water; the pH should be between 6.5 and 8.5.



#### Step 3: Discharge pool water

##### WARNINGS

Never discharge pool water into storm drains as these likely lead directly to the ocean.  
Do not discharge pool water that has had a recent addition of algicides or other chemicals.

##### Option 1:

##### Discharge pool water into the sewer system

Some counties or local municipalities allow the discharging of pool water into the sewer system after being neutralized. Disposing into a sewer system also ensures a certain level of water treatment. Check with your wastewater provider for rules and follow all local instructions and regulations. For example, some wastewater facilities require discharge to occur at night to avoid peak flow times.

##### Option 2:

##### Discharge pool water into a depression in the ground

If sewer system discharge is not available, slowly release the neutralized pool water into a shallow depression in the ground. This depression should contain vegetation to allow water filtration through plants before sinking into the ground. It is perfectly acceptable to use backwash water to irrigate landscaping.

**A note on Saltwater Pools:** For saltwater pools, use either of the two options above. If using option two, ensure that plants in the depression are of a salt-tolerant variety.

## General Guidelines

### If using **Option 2**, follow these guidelines:

1. Avoid discharging during or immediately following heavy rains. The ground is likely to be saturated, which reduces the soil's ability to filter pool water.
2. Use a low-flow pump or siphon to control the rate of discharge to avoid erosion or flooding. A dispersal unit can be added to the end of the backwash hose to help spread the water more evenly.
3. Make sure water is not inadvertently flowing into streets, storm drains or gutters, which could lead to the ocean.
4. Direct the discharge over a vegetated surface so that plants can assist in the filtration of pool water. If using a dry well for pool water disposal, let the water flow across the grass or surrounding plants first, and then into the dry well.
5. Do not discharge on areas recently treated with fertilizers, herbicides or pesticides.



## Thank You!

You can make a real difference in protecting Hawai'i's unique marine resources by following these simple guidelines when discharging water from your pool or hot tub.

## Additional Resources

Check the following websites for rules on how to discharge wastewater:

**Hawai'i Island** - Wastewater Division of the Department of Environmental Management:  
[www.hawaiicounty.gov/dem-wastewater-division](http://www.hawaiicounty.gov/dem-wastewater-division)

**Kauai** - Wastewater Management Division of the Department of Public Works:  
[www.kauai.gov/PublicWorks/WasteWater](http://www.kauai.gov/PublicWorks/WasteWater)

**Maui County** - Pretreatment Coordinator at Maui County's Environmental Management Wastewater Reclamation Division: [www.co.maui.hi.us/1025/Wastewater-Sewer-Services-and-Information](http://www.co.maui.hi.us/1025/Wastewater-Sewer-Services-and-Information)

**O'ahu** - Department of Environmental Services:  
[www.honolulu.gov/envwwm.html](http://www.honolulu.gov/envwwm.html)

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The Coral Reef Alliance (CORAL) is an international nonprofit that unites communities to save coral reefs. In Hawai'i, CORAL is working with local partners to improve water quality for reefs and people through its Clean Water for Reefs Initiative.

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