

Clean Boating Tip Sheet

Underwater Hull Cleaning:

Tips for divers, marina operators, and boaters

In order to maintain maximum performance and to stretch the time between haul-outs, some boaters hire professional divers (or dive themselves) to clean their hulls while their boats are in the water. If done properly, underwater hull cleaning removes marine growth and a minimal amount of antifouling paint. When done too vigorously or when ablative paint is scrubbed, however, unacceptable levels of toxic bottom paint are released into the surrounding water.

The following tips for divers, boatyard and marina operators, and boaters are intended to guide decisions about hull treatment and maintenance. By working together, we can minimize the pollution problems associated with underwater hull cleaning.



Best Management Practices for Divers

- Clean gently to avoid creating a plume or cloud of paint in the water.
- On boats painted with ablative paints, clean only running gear and zinc anodes.
- Refrain from hull cleaning for a minimum of 60 days after hard antifouling paint has been applied.
- Always use the least abrasive material that will effectively clean the painted surfaces:
 - Use soft sponges or pieces of carpet to clean marine growth.
 - Use soft nylon or similar material on rotary brush machines.
 - Use more rigorous cleaning pads only as needed to remove hard growth.
 - Use stainless steel pads or brushes only on unpainted metal areas.
- Do not clean the entire hull if it is not dirty. Just do the waterline, running gear, and propeller.
- Never sand, strip or chip hull paint underwater.
- If you have been hired to replace zinc anodes, bring the old ones ashore for recycling. Look in the phone book under "scrap" for dealers.
- Provide customers with a copy of your standard pollution prevention procedures.
- Learn more about the environmental impacts of underwater hull cleaning and sign the *Maryland Clean Diver Pledge* at dnr.maryland.gov/boating

Best Management Practices for Boatyard and Marina Operators

- Provide an alternative to underwater hull cleaning by offering mid-season pressure wash specials.
- Allow only divers that follow the Best Management Practices outlined above to clean hulls within the confines of your marina. Ask all subcontractors to sign in. Also, ask to see a current business license and proof of liability insurance.
- Keep a referral list of reputable divers to pass along to boaters seeking underwater hull services.
- Encourage boaters that typically hire divers to use hard bottom paints.
- After painting a boat's hull, provide the boat owner with a simple description of the paint used and the maintenance requirements. For example, "Your boat was painted on April 27, 2008 with Barnacle B-gone. Barnacle B-gone is an ablative paint. It should not be scrubbed while in the water. The active ingredient is cuprous oxide which is a potent biocide. A copy of the Material Safety Date Sheet is attached for your information. Barnacle B-gone retains its antifouling effectiveness when hauled and can be relaunched without repainting. Depending on frequency of use and other factors, the hull will need to be repainted in approximately 2 years."
- Ask customers who have had their hulls coated with ablative paints to read and sign a notice that states, "I understand that my boat has been painted with an ablative paint. If the hull is scrubbed while in the water, unacceptable concentrations of paint and the pesticide cuprous oxide will be released."
- Earn cash by collecting and recycling used zinc anodes. Look in the phone book under "scrap" for dealers.

Best Management Practices for Boaters

- Take advantage of "quick haulout specials" if offered by your marina.
- Where practical, store your boat out of the water.
- Be aware that colored plumes should NOT be visible in the water near underwater cleaning activity. They indicate that paint, rather than just marine growth, is being rubbed off of your boat.
- Let divers know you expect them to minimize pollution while working on your boat. Ask them to follow the best management practices for divers listed above.
- Never hire a diver to clean a hull painted with ablative (i.e., sloughing) paint.
- Be knowledgeable about your antifouling paint. Ask your yard manager to provide a written statement describing the name and type of paint used, health and safety warnings, maintenance requirements, and date applied. Keep a record of this same information if you paint your own hull.
- If you know you will want a diver to clean your hull, select a hard or slick paint.
- Consult product labels to know how long to wait after applying fresh, hard bottom paint to have the hull safely cleaned underwater.
- Consider low copper hard paints or non-toxic slick coatings and regular underwater hull cleaning instead of high copper content paints.
- Before hiring a diver, get local references from a marina operator or other boaters who know the diver's work.



For information about the Maryland Clean Marina Initiative contact the Maryland Department of Natural Resources at (410) 260-8773 or visit dnr.maryland.gov/boating