



## Aquatic Antifouling Fact Sheet

Aquatic antifouling paints are considered pesticides because they prevent the growth of undesirable aquatic organisms such as barnacles and algae. Pesticides are regulated on the federal level by the Environmental Protection Agency (EPA) and on the state level by the Washington State Department of Agriculture (WSDA). These agencies have three main pesticide responsibilities:

- Registering pesticide products.
- Licensing people involved with the use of pesticides.
- Enforcing federal and state pesticide laws.

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is the federal pesticide law administered by EPA, and it categorizes all pesticides as either general use or restricted use. FIFRA places pesticides into the restricted use category if they pose unreasonable adverse effects to the environment and/or injury to applicators or bystanders without added restrictions. A restricted use pesticide (RUP) is more strictly regulated than a general use pesticide.

For example, antifouling paints containing tributyltin (TBT) are classified as RUPs because of increased environmental concerns. Those containing copper are classified as general use pesticides.

### Restrictions on the Use of TBT Antifouling Paints

#### Restricted Use Pesticides (RUPs)

All TBT antifouling paints are federal RUPs except aerosol containers of 16 ounce or less labeled solely for application to outboard units.

TBT paints gained the restricted use pesticide designation in 1990 because of their acute (from short-term exposure) and chronic (from long-term exposure) toxicity to non-target aquatic organisms such as fish, bivalves, gastropods, crustaceans, and algae. Levels of TBT shown to cause toxic effects in sensitive organisms have been found in the waters in and around marinas, dry docks, and poorly flushed harbors.

A restricted use statement must be prominently displayed at the top of labels on RUP TBT antifouling paints. Labels of general use pesticides, such as copper antifouling paints, will not indicate their classification status because they are not restricted use.

#### Other Restrictions

In addition to designating TBT antifouling paints as RUPs, EPA and the Organotin Antifouling Paint Control Act of 1988 (OAPCA) established the following restrictions:

- Use of TBT products on vessels less than 82 feet (25 meters) in length is prohibited except for those with aluminum hulls. This restriction does not apply to the outboard motor or lower drive unit of a vessel less than 82 feet in length.
- The organotin release rate may not exceed 4 micrograms per square centimeters a day. The release rate is the amount of organotin given off by a painted surface.

- The labeling must require compliance with applicable Occupational Safety and Health Act (OSHA) regulations and must contain the following directions for use:
  - During and after paint removal and/or application of new TBT paint, employ methods designed to prevent introduction of TBT paints into aquatic environments.
  - Following removal of TBT paint and/or application of new TBT paint, all paint chips and spent abrasives, paint containers, unused paint, and any other waste products from paint removal or application must be disposed of in a sanitary landfill\*.+

\* Also known as municipal solid waste landfill.

+ As indicated in the "State Laws Affecting Pesticide Users" section, Washington State requirements are often more restrictive than the federal ones indicated on pesticide labels. The Department of Ecology (Ecology) may classify wastes cited above as dangerous waste. This would require that they be containerized and disposed of in accordance with state and federal hazardous waste regulations. For more information, contact Ecology.

## Licensing

Only licensed pesticide applicators or individuals under their direct supervision may buy and apply pesticides which are restricted use such as TBT. Most individuals involved in the commercial application of both restricted and general use pesticides must be licensed or under the direct supervision of a properly licensed applicator.

In this case, direct supervision means direct on-the-job supervision and requires that the licensed applicator be physically present at all times during the application. The licensed applicator must be within view and earshot of the unlicensed applicator.

Washington boatyards which apply only general use pesticides such as those containing copper do not need to be licensed as Commercial Applicators. These exempted businesses may not use restricted use pesticides and they may not advertise that they perform pesticide applications.

By law, distributors may sell restricted use pesticides only to licensed applicators or their authorized representatives. Dealers of all pesticides except those labeled solely for home and garden use must be licensed as well. General use antifouling paints in containers of one gallon or less are considered to be home and garden pesticides for this licensing requirement.

## Recordkeeping

The Washington Pesticide Application Act requires that all licensed pesticide applicators maintain records of their applications. The state recordkeeping requirements are contained in RCW 17.21.100, as well as in WAC 16-228-1320. Update state application records daily, when applicable. In addition, EPA requires that records be kept at disposal sites of TBT containing dust, chips, and/or other TBT wastes generated by users.

Dealers must maintain records on the sales of restricted use pesticides. The recordkeeping requirements are identified in WAC 16-228-1300.

Application and dealer records must be maintained for a period of seven years. Refer to the Recordkeeping Requirements section of the "Washington Pesticide Laws and Related Regulations Handbook" which can be found on the WSDA website ([agr.wa.gov](http://agr.wa.gov)).

## Pesticide Labels

Federal law considers pesticide labels to be legal documents providing directions on how to handle, mix, apply, store, and dispose of a pesticide product. All registered pesticide labels contain the statement “It is a violation of federal law to use this product in a manner inconsistent with its labeling.” Therefore, label information is both invaluable in ensuring the proper use of a product and legally binding. Anyone involved with using pesticides must adhere to all restrictions, precautions, and directions for use. Deviations from the label, except in very rare circumstances, is prohibited.

However, deviation from product labels is required when state or other local laws are more restrictive than the label. For example, TBT paint labels are required to contain a statement about disposing of all TBT related wastes in a sanitary landfill. In Washington, these wastes may be designated dangerous wastes under the state’s Dangerous Waste Regulations. Disposal according to the product label (e.g. at a sanitary landfill) may violate these regulations. Refer to Ecology’s information under “State Laws Affecting Pesticide Users” and contact Ecology for specific state requirements, particularly in regards to hazardous waste disposal.

### Label Violations

The statement “It is a violation of federal law to use this product in a manner inconsistent with its labeling” prohibits most activities not expressly allowed on the label, even if the label does not prohibit the activity.

Therefore, in the case of TBT paints, it would be illegal to do any of the following:

- Apply the product to a non-aluminum hulled vessel less than 82 feet in length (see first bullet under “Other Restrictions”).
- Introduce any TBT antifouling paint or residue into an aquatic environment (see third bullet under “Other Restrictions”).
- Sell the product to an unlicensed individual (see section “Restricted Use Pesticides”).
- Use the product without first being properly licensed or being under the direct supervision of a licensed individual (see section “Restricted Use Pesticides”).
- Failure to comply with all applicable OSHA requirements (see third bullet under “Other Restrictions”).

When applying any antifouling paint, it would be illegal to:

- Wear less protective equipment or clothing than specified on the product label.
- Ignore any other label precautions, restrictions, or directions of use.

## State Laws Affecting Pesticide Users

WSDA enforces both federal and state pesticide laws. Under FIFRA, states can adopt pesticide laws which are more restrictive than federal laws. Therefore, individuals involved with pesticide use must comply with directions and restrictions on product labels and be aware of any applicable state and local laws that may supersede less restrictive federal ones. In most circumstances, pesticide labels will not reflect these more restrictive state requirements even though the applicator, dealer, and consultant are expected to comply with them.

WSDA administers Washington pesticide laws and rules under the following:

- Washington Pesticide Control Act (RCW 15.58)
- Washington Pesticide Application Act (RCW 17.21)
- General Pesticide Use (WAC 16-228)

For example, Washington pesticide law is more restrictive than label requirements for pesticide storage. Under “Storage and Disposal,” a label may state “Do not contaminate water, food, or feed by storage or disposal.” Washington’s law is far more specific regarding storage, particularly if the label bears the “Danger” signal word. Washington pesticide law requires that Category 1 pesticides (those with the signal word “Danger”) be stored in an enclosure specified in the WAC and that the enclosure be locked when unattended and posted with applicable warning signs. Pesticides designated with signal words of “Warning” or “Caution” must be securely stored, out of reach of children, in an enclosure in the above cited WAC.

Laws administered by other city, county, and state agencies may also be more restrictive than the pesticide label. For example, Ecology regulates hazardous waste disposal in Washington State. This agency has extensive laws regarding hazardous waste disposal and should be contacted before any disposal of paint chips, spent abrasives, paint containers, and any other waste products from paint removal or application or if a hazardous substance spill occurs. Ecology is the lead agency for protecting Washington waters. Ecology should be contacted immediately if there is an accidental release of a hazardous material into a waterway.

The Department of Labor & Industries (L&I) enforces laws that protect workers from exposure to unsafe and hazardous work environments. L&I enforces OSHA requirements on the state level. L&I also has specific state laws administered under the Washington Industrial Safety and Health Act, which may be more restrictive than applicable OSHA requirements.

Washington Department of Health (DOH) investigators are trained to evaluate cases of potential pesticide exposure to humans and animals. They can provide information on pesticide toxicology and the ways to prevent future exposures.

### **Violations of State Pesticide Law**

RCW 15.58.260 and 17.28.315 provide for imposing a civil penalty and/or pesticide license denial, suspension, or revocation for pesticide law violations. The civil penalty can be as high as \$7,500 per violation. Most pesticide investigations conducted by WSDA involve multiple violations. In addition, those who violate state pesticide law can be charged with a misdemeanor and a gross misdemeanor for any second and subsequent offense. EPA also has the authority to administer federal penalties.

## **PREPARING FOR THE EXAM**

The information contained in this fact sheet, along with portions of the Washington State University (WSU) study manual titled “Washington Pesticide Laws and Safety” (WSU Publication EM012), are adequate study material for those interested in taking the Aquatic Antifouling exam. The study manual is available through WSU by calling 800-723-1763 or their website at [pep.wsu.edu/studymaterials/](http://pep.wsu.edu/studymaterials/). Once you have obtained this manual, you should study all portions except the following sections:

- Pesticide Formulations
- Worker Protection Standards
- Organophosphate or Carbamate Insecticide Toxicity
- Mixing and Loading
- Wood Destroying Organism Inspection Reports
- Agricultural Field Posting
- Landscape Posting
- Pesticide Sensitive Persons

Do you need this publication in an alternate format? Contact WSDA at (360) 902-1976 or TTY Relay (800) 833-6388.