I. INTRODUCTION

The purpose of this fact sheet is to discuss the significance of United States Environmental Protection Agency (EPA) regulation of pesticides and pest control devices for use in recreational water.

II. SUMMARY OF CHARACTERISTICS

- A pest is defined by the EPA as any living organism (for example rodents, insects, bacteria or viruses) that appears where it is not wanted or causes damage to crops, humans or other animals.
- A pesticide is defined by the EPA as a product that “incorporates a substance or mixture of substances designed to prevent, attract, repel, destroy, or mitigate a pest...”¹ Examples of pesticides used in pools or spas include sanitizers, disinfectants and algaecides.
- A pest control device “uses only physical or mechanical means to trap, destroy, repel, or mitigate any pest and does not include any pesticidal substance or mixture of substances.”¹ UV systems, electrolytic chlorine generators and ozone generators are examples of pest control devices used in connection with recreational water.
- Any manufacturing location (i.e. Establishment) that produces either pesticides or pest control devices for sale or use in the USA must be registered with the EPA and receive an EPA Establishment Number. The EPA Establishment Number must appear on the device or on the pesticide package.
- Every pesticide sold in the USA must be registered by the EPA. The unique EPA Registration Number of the product must appear on the package label. Pest control

¹ EPA Regulation of Pesticides and Pest Control Devices

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Brought to you by the APSP Recreational Water Quality Committee

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devices are not registered in this fashion, though the Establishments at which they are manufactured must be registered.

- EPA oversight of pesticides and pest control devices helps to insure that efficacy and safety to humans, domestic animals and the environment are all evaluated using legal and scientific criteria before these products are registered and offered for sale.
- There are some products used in the recreational water industry that do not kill or mitigate any pests. These products may enhance the operation of the pool or spa but fall outside the scope of EPA pesticide regulation.

III. GENERAL DESCRIPTION

Note: For the purposes of this document the terms sanitizer and disinfectant are used interchangeably.

Safe operation of pools and spas depends on constant maintenance of a sanitizer residual in the water. In addition, algaecides or shock products may be required as well due to various conditions. Use of pesticide products that are EPA registered for the required function is an important aspect of insuring that the products are safe and effective. Supplementary or secondary sanitizer treatment is also often desirable or in some cases mandated by code. Devices such as UV systems or ozone generators can provide effective secondary sanitization, but such devices must be made by EPA Registered Establishments. Due to the legal and scientific scrutiny imposed during the registration process, use of EPA Registered pesticides and pest control devices from EPA Registered Establishments provides a level of assurance not only about the legality of the pesticide or device, but also its efficacy and safety when used according to label directions.

A. Pesticides

The EPA defines a pesticide as a product that “incorporates a substance or mixture of substances designed to prevent, attract, repel, destroy, or mitigate a pest.” Generally pesticides include insecticides, insect repellants, weed killers, fungicides, rodenticides, and disinfectants—including disinfectants and sanitizers used in water treatment. In the field of recreational water pesticides are generally directed at controlling algae and water-borne pathogens such as disease causing bacteria, viruses and protozoan parasites.
Under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), the EPA is charged with evaluating all pesticides to insure that they comply with federal requirements regarding protection of human health and the environment. Before being sold or used in the United States, a pesticide must be granted a license or “registration” by the EPA. Evaluation of the candidate pesticide includes consideration of accuracy of label claims, efficacy as a pesticide, safety of workers or others who may directly or indirectly come in contact with the pesticide and the environmental impact of using the pesticide.

Pesticide producing Establishments must be registered with the EPA. A registered Establishment is assigned an EPA Establishment Number which must appear on the labels of all EPA registered pesticides produced by the Establishment. Registered products are required to meet rather exacting label requirements. Labels must include the following:

- specific listing of all pesticidal active ingredients and their percentages in the product along with an indication of the total percentage of all inert ingredients,
- the amount of product in the package,
- directions for use,
- precautionary statements regarding hazards to humans, domestic animals or the environment,
- physical and chemical hazards,
- directions for safe storage and disposal,
- warnings to keep the product out of reach of children,
- first aid recommendations,
- the name and address of the manufacturer,
- the EPA Establishment Number(s) for the plant(s) in which the product is produced,
- the EPA Registration Number assigned to the specific product from a specific company.
The same Registration Number may be used on multiple brand names from the same manufacturer as long as the composition is the same in terms of all pesticidal active ingredients and their percentages. The EPA Registration Number generally consists of two or three sets of numerals separated by a hyphen or hyphens. The first set of digits identifies the company that owns the registration. The final digits identify the specific product. If there is a 3rd set of digits between the first and final digits, then the product is made by one company and sub-registered by another company or distributor.

The EPA Establishment Number generally consists of three parts separated by hyphens. The first part is code for a specific company. The second part is the two letter postal abbreviation for the state in which the establishment is located. The final digit(s) indicate the specific facility (Establishment) within the indicated state. Some pesticide labels list two or more Establishment Numbers, indicating that the same product is produced in multiple locations or Establishments.

Critical label wording is standardized to insure clear communication and compliance with label requirements. Registered pesticides are also subject to periodic review and reevaluation by the EPA.

In addition to EPA registration, a pesticide must also be registered in the individual states in which it is to be sold. The state EPA or equivalent body will evaluate the pesticide using the same general criteria as the EPA uses, but may have additional requirements.

The clearest indication that a product has been granted registration is the presence of the EPA Establishment Number and EPA Registration Number on the package. Often these numbers will appear on the back or side label in fairly small print, but regardless of where they appear on the label, they must be present for the pesticide to be sold legally in the US. Knowledge of the EPA Registration Number will allow any interested person with internet access to navigate to an on-line version of the label and previous versions of the label, along with cover letters from the registration process. On-line labels are available via the EPA PPLS (Pesticide Product Label System):

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http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1:2600208107079044 or EPA
Even if the registration number is not known, it may be possible to locate the on-line product label by searching at the PPLS web site under the name of the product or company.

To insure that registered pesticides are used effectively, safely and in an environmentally sound fashion federal law requires that the pesticide be used only as directed on the label. The label will state, “It is a violation of Federal law to use this product in a manner inconsistent with its labeling.”

B. Pest Control Devices

Whereas a pesticide is a substance (chemical or formulation) designed to control pests, a device “uses only physical or mechanical means to trap, destroy, repel, or mitigate any pest and does not include any pesticidal substance or mixture of substances…”

Thus devices such as ozone generators (UV or corona discharge based), UV light systems, and electrolytic halogen generators fall in the category of microbial pest control devices. Devices that simply dispense an EPA registered pesticide, such as chlorine feeders, are not classified as pest control devices. If the dispenser is not assembled and sold with the pesticide, the manufacturing location of the device does not need to be an EPA registered Establishment and pest control device legal requirements do not apply. In such a case the EPA regulates the pesticide, but the dispensing device is exempt. If on the other hand a pesticide and device are packaged together, the combination is considered a pesticide and is subject to pesticide regulation.

Like pesticides, pest control devices made or used in the United States can only be manufactured in EPA-registered Establishments. The manufacturer is required to obtain registration for the Establishment before beginning production or distribution of the devices. This requirement even applies to foreign manufacturers selling products in the US. (FIFRA Section 17(c), See also EPA Compliance Monitoring/Importing and Exporting Pesticides and Devices, http://www.epa.gov/compliance/monitoring/programs/fifra/importexport.html)

Pest Control Devices are subject to the following label requirements:

1. They cannot bear any statements that are false or misleading.
2. The EPA Establishment Number of the device’s manufacturer must appear on the device label and on any outer packaging if the device is packaged in such a way that the EPA Establishment Number on the Device label is not visible from outside the outer packaging.

Device producing Establishments are also subject to annual reporting requirements. Reports include the number of devices made or distributed in the previous year and projections for the current year.

State agencies generally also have requirements related to sales of pest control devices.

IV. CONCLUSION

Occasionally products with pesticide-related claims (“sanitizer”, “kills germs”, “destroys algae”, etc.) gain entry into the market without submitting to legal requirements for EPA registration. Such products may be ineffective, unsafe, and misrepresented. Checking the product label for an EPA Establishment number (“EPA Est. No.”), and in the case of chemical pesticides an EPA Registration Number (“EPA Reg. No.”) is the most straightforward way of determining legitimate products. The EPA numbers on the labels provide a verifiable means of ensuring that the product is legal to use (when used in compliance with label directions) and has been scientifically evaluated by the EPA in terms of safety, efficacy, environmental impact, and legitimacy of label claims.

V. REFERENCES

1. www.epa.gov/pesticides/about/index.htm

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