## What Is FQPA?

n the summer of 1996, Congress unanimously passed, and President Clinton signed into law, the Food Quality Protection Act (FQPA). This landmark measure protects Americans, especially children, from potential risks associated with food.

FQPA amends two major pesticide laws: the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and the Federal Food, Drug and Cosmetic Act (FFDCA). The law mandates a single, health-based standard for all pesticides in foods, special protection for infants and children and expedited approval of so-called safer pesticides.

A number of the food protection pesticides affected by the act are the same products used by turf managers and golf course superintendents in home, garden and urban settings to ensure safe and effective pest control. FQPA has broad implications for all consumers.

Within a short time, the U.S. Environmental Protection Agency (EPA) will re-evaluate almost 10,000 pesticide uses (see sidebar). This analysis determines which pesticides will remain available and which won't.

Under FQPA, EPA is mandated to use "available information" in passing judgment. Instead, EPA is making broad assumptions when information is not available – including theoretical calculations that are not based on fact. Those concerned about pest risks

### EPA's Task at Hand

FQPA establishes a new safety standard for pesticide residue tolerances in food. To ensure the new standard applies to all pesticides, EPA must reassess all pesticide tolerances that were in effect when the law passed. These total 9,721 pesticides that must be reassessed by 2006.

In August, EPA completed 3,290 tolerance reassessment decisions, or a little more than the required 33 percent. Many of these were old registrations no longer in use that the EPA needed to get off its books.

Its next deadline is Aug. 3, 2002 when it must complete another 3,000 reassessments. Its final deadline to review all pesticide tolerances is Aug. 3, 2006.

to Americans are worried that "fast-track" implementation of FQPA, using insufficient data, will result in unnecessary elimination of many valuable pesticides.

Decisions must be made on actual use, not projections or assumptions. Policies must be uniform and readily understood so the law can be consistently implemented.

With so much riding on the EPA's work, the decisions the agency makes should be based on clear thinking and sound science. However, a great deal of emotional arguing has come into play, leading the EPA to make decisions based on the force of certain public opinion. Anti-pesticide activists rely heavily on emotion to influence this public opinion and EPA listens to them.

# The Cost of Lost Pesticides

Texas A&M University and Auburn University recently conducted a study analyzing the costs to the United States if key pesticide uses are discontinued.

A ban on organophosphates and carbamates would result in more food imports, higher food prices for Americans, less consumption of nutritionally important fruits and vegetables, lower crop yields and increased production costs for America's farmers.

A complete ban would result in a \$17 billion reduction of the nation's aggregate economic output, the loss of 209,000 jobs and would decrease income related to the production and sale of products by \$9 billion.

And that's just for the agricultural market because the study did not look at urban uses of pesticides.

#### **How Tolerances Effect the Green Industry**

OK, so it's somewhat logical the effect FQPA has on food and agriculture. But people don't eat turf, ornamentals or trees, so how are pesticides used in the green industry affected by all of this?

Every active ingredient has hundreds of applications. One active ingredient may be effective against turf pests, but is also used for pests found in homes and agricultural fields. Considering one application at a time, this isn't a problem. FQPA, however, considers the sum total of risk associated with a given chemical and combines all of its potential uses. Risk is assessed in two ways:

Aggregate risk assessment — all the potential uses for a particular chemical added together.

Cumulative risk assessment — any risks associated with a given

chemical, plus any chemical with a similar mode of action to the first chemical, added together.

An example of a cumulative risk is that when assessing chlorpyrifos, the risk from other chemicals that aren't chlorpyrifos — but act the same way — have to be factored in to measure cumulative risk. For chlorpyrifos, this would include all other organophosphates, such as diazinon and malathion.

Once the risk is defined, how much risk is safe must be decided. For each chemical or class of chemical, the EPA creates a risk cup, which is a measure of maximum allowable safe risk for a given chemical.

To keep the cup from overflowing, the EPA decides upon the necessary action:

- 1. Eliminate uses A manufacturer may be asked to eliminate the outdoor turf uses to continue agricultural uses of the same active ingredient.
- Risk mitigation To reduce the risk associated with the use of a product, manufacturers might mandate precautions, such as wearing head-to-toe protective equipment each time a product is handled.
- No new uses Refraining from adding any additional risk keeps the risk cup from overflowing.

The question for a manufacturer becomes: Is it cost-effective to support the use of an active ingredient in a small market like turf care or continue its use in a bigger market like agriculture?

### Fair Implementation Is Main Concern

"We're supportive of the basic concepts of FQPA and are confident that it could be implemented reasonably," says Allen James, executive director of RISE (Responsible Industry for a Sound Environment).

RISE, the national association representing manufacturers, formulators, distributors and other industry leaders involved with specialty pesticide products, along with numerous applicator associations, is working to assure fair implementation of FQPA.

"If EPA doesn't implement the law fully and fairly, many effective and reliable pesticide uses could be lost to businesses and consumers that rely upon these products," James explains.

As a result of the way EPA is implementing FQPA, turf management professionals may lose valuable pesticides. As these pesticides are lost, turf managers won't be able to properly apply Integrated Pest Management measures.