FQPA: A Farmer's Perspective

New provisions make sense only if EPA uses real data and reliable information for its assessments.

By Keith W. Eckel

My farm is in northeastern Pennsylvania. I grow tomatoes, pumpkins, wheat, field corn and sweet corn. Without safe crop protection products, I would not be able to produce these crops. As an individual investing in the business of food production, I need to be assured that safe crop protection tools will be available when I need them. Chemical pesticides have been a part of my crop protection tools for as long as I have been farming.

The future of these tools seems uncertain now that the Environmental Protection Agency (EPA) has started to implement the directives of the Food Quality Protection Act (FQPA). I may lose the use of safe, and effective crop protection tools because of political decisions being made by the U.S. Environmental Protection Agency. Thousands of other producers across the country are facing the same fate if the EPA continues to implement the FQPA without developing an understandable safety assessment process, and without making the Act workable for farmers, consumers, and other stakeholders.

Empty Food Basket: Farmers could face the loss of safe and effective crop protection tools if FQPA is implemented without a workable safety assessment process.

Let Sound Science Be the Judge

Our regulatory system is the most rigorous in the world. Yet that system, as it is currently administered, threatens to do serious harm to family farms in this country while providing no increase in consumer safety. Recent EPA actions seem reckless and have the potential to cause severe harm to many in agriculture. Along with many other farmers, I don't believe that Congress intended to affect all users of pest control products by asking EPA to make hasty decisions based on theoretical risk levels associated with pesticides. Instead, we believe and agree with Congress that sound science and a fair testing and registration process is the foundation of this law.

Prior to FQPA, pesticide safety assessment focused on dietary risk. After passage of the FQPA, additional types of exposures — such as drinking water and residential exposure — had to be considered. These provisions make sense only if the agency uses real data and reliable information for its assessments. To do otherwise doesn't help the regulatory system protect public health;

it only makes the regulations more difficult to follow.

Real data take on more importance in light of the new requirements of FQPA. Assumptions about the use of agricultural pest control products, added to similar unrealistic assumptions from the structural pest control industry and from drinking water models, are leading to unreliable and unrealistic risk assessments for some of the most widely used and safest products in the country. The EPA acted to mitigate this "theoretical risk," by canceling farm and home uses of these products.

Political Guinea Pigs

In August 1999, the EPA took action on two widely used crop protection products under the guise of protecting the public from unsafe levels of pesticide in food. The use of azinphos methyl (Guthion®) was severely restricted and half the uses of methyl parathion (Penncap-M®) — essentially all the fruit and vegetable uses named on the label — were cancelled. Ironically, these decisions were made on the eve of FQPA's third anniversary, and just prior to the Act's first major deadline for risk assessment. The decisions were made outside the reassessment process, which is still being developed, and were based on unrealistic assumptions and unclear science policies. The decisions only served to unnecesarily scare consumers about the safety of their food. Farmers' many fears about FQPA were realized.

The decisions only served to unnecesarily scare consumers about the safety of their food.

So what is this "shoddy science" I refer to? Let me highlight actions taken this past June by the EPA on one of the most widely used crop protection tools in America, chlorpyrifos (better known as Lorsban® or Dursban®). Chlorpyrifos is one of the most important, most widely used, and safest insecticides in the nation. It provides effective and economical control of a wide variety of pests (mites, scale, leaf rollers, rootworm, cutworm, grubs, ants, borers, thrips, and many others), and works well in various crop rotations and integrated pest management programs. Chlorpyrifos is registered for use on over 40 crops, including alfalfa, almonds, apples, asparagus, broccoli, Brussels sprouts, cauliflower, Christmas trees, corn, cabbage, collards, cherries, citrus, cranberries, grapes, grass seed, mint, onions, peaches, peanuts, pecans, radishes, rutabaga, sorghum, soybeans, sugar beets, strawberries, sweet potatoes, sweet corn, tobacco, turnips, walnuts, wheat, and others.

On June 8, the EPA announced that Dow AgroSciences and five other registrants had voluntarily canceled all home, pet, and garden uses of chlorpyrifos except termite uses, and these were to be phased out by 2004. EPA identified agricultural uses on apples, grapes, and tomatoes as contributing to a dietary risk problem for children. Use on these three commodities was either restricted or cancelled.

There are no human health risks of concern for chlorpyrifos under international regulatory standards. The World Health Organization gives chlorpyrifos a clean bill of health. The differences between EPA and international standards relate to EPA's new FQPA science policies. These policy decisions, not actually required by the law, allowed EPA to ignore sound data when making its final risk assessment for this product. The policy decisions included the following:

EPA chose to ignore available human data, which the agency has used for years when setting safety standard for this product. It used rat data instead. Because rat data was used, a number of assumptions that greatly skewed the results were incorporated in the assessment

EPA chose to regulate chlorpyrifos at a 99.9 percentile of exposure level versus the traditional 95.0 percentile level. An EPA official said that if EPA had lowered this statistical manipulation by only 0.2 percent, down to 99.7 percent, "all risk would disappear" for chlorpyrifos.

EPA changed policy in mid-stream. In its preliminary risk assessment, the agency used a 3-fold safety margin which showed no dietary risk, then changed it to a 10-fold safety margin in a new assessment which shows dietary risk. This was a policy call, not the use of sound data, and it changed the entire risk picture for this product.

Prior to announcing the decision, a number of major print and broadcast news reports seriously mis-characterized the safety of this insecticide by claiming that EPA intended to "ban" chlorpyrifos products because a recent study allegedly found that the product caused brain damage in fetal rats.

There is no scientific evidence that the labeled use of chlorpyrifos products causes adverse effects, even in particularly sensitive persons — children included. The allegations failed to note that the dose at which these alleged effects occurred in laboratory animals was two hundred times the exposure rate that people would typically receive from labeled use of chlorpyrifos products. This would be the equivalent of making more than two hundred applications of these products in your own home in a single day (at a cost of roughly $7,000!).

As part of their actions on chlorpyrifos, the EPA announced that the products "pose no imminent threat to public health" and as a result the agency "won't order a recall of products containing it." So it's safe, but somehow, it is not safe. Chlorpyrifos products have been on the market for more than 30 years. No pest control product has been more thoroughly studied. More than 3,600 studies and reports have been conducted to determine critical aspects of chlorpyrifos products as they relate to health and safety. Taken together, these reports and studies show that currently labeled uses of these products provide wide margins of safety for both adults and children.

We need a regulatory process based on sound science and trust. If a product poses an imminent hazard to children or the general public, EPA can and should pull it immediately. EPA did not do this with chlorpyrifos, and the data do not support this action. If it did, farmers would be the first to call for the removal of the product. By choosing not to do this, EPA has shown that it knows the theoretical risk is not there. Where is the sound science?

Creating an Understandable Safety Assessment Process

The organophosphate (OPs) class of crop protection products represent the single most important class of insecticides used in the United States. They are also essential to Integrated Pest Management programs. EPA has selected them to be the first to move through the FQPA assessment process. The assessment is scheduled to be completed by the end of this year.

I use several organophosphates on my farm: diazinon (Diazinon) on my tomatoes and pumpkins, and azinphos methyl (Guthion) and dimethoate (Dimethoate) on my tomatoes. The latest actions taken by EPA increase my anxiety and concern.

As a grower, a clear and understandable safety assessment process means that I can tell the consumer how I raise a safe and affordable product. Growers and the non-agricultural pesticide-using community trusted that the implementation process for FQPA would be clear and that it would follow established administrative procedures for federal rules and regulations. It has not.

Since the passage of FQPA four years ago, not a single science policy rule has been finalized to lock EPA into a clear position on how it intends to implement the law. Instead, the agency has provided "revised guidance documents" that are unclear and incomplete. In many cases, they ignore comments that farmers supplied to EPA. How can the agency make fair safety assessments at the same time it is seeking public comment on the process? Without solid policies can anyone possibly understand the process?

Making FQPA Work

If EPA is going to make FQPA work, it needs to listen to what farmers have to say about how they use crop protection products. The information needs to be collected and used in the safety assessment process. EPA says it does this. Officials say they coordinate with USDA to hold conference calls to growers. This is true. But more often than not, the growers participating in these conference calls find out that the information they provided the agency has been ignored. Farmers could help make FQPA work if EPA would engage and strengthen these relationships, and listen and act in a manner that will not cause a disruption to agriculture — a circumstance which FQPA prohibits.

I give USDA a pat on the back for its efforts in trying to get farmers engaged in the process and for its continual review of EPA's work. But more needs to be done. USDA needs to be brought farther into the process and allowed more time to conduct reviews of safety assessments and then to work with EPA and farmers to enable smooth transitions to new products if certain products or uses are lost.

Transitions and adoptions and adaptations are always present in production agriculture. I am constantly adopting new practices on my farm. I need to stay abreast of the latest technology and practices and then make reasonable decisions. To me, transition means identifying new crop protection products, practices and technologies as alternatives for products that show unreasonable risk. These alternatives must be economical, safe and effective. My creditors would frown on me accepting — with blind faith and wink and a nod from EPA — that an alternative will be available down the road.

A Balanced Approach

It seems that some of the most important facts are being lost in this FQPA debate. Let's put the risk of exposure to crop protection tools in perspective. Americans have a one in four chance of dying from heart disease, a one in 75 chance of dying in a motor vehicle accident, a one in140 chance of dying from homicide and a one in 28,500 chance of dying from a lightning strike. Americans have less than a one-in-a-million chance of having an adverse reaction from pesticide exposure. So, should we be concerned about exposure to pesticide residue in our food? Yes, but shouldn't we also keep in mind as we implement FQPA, that we need a *balanced* implementation of FQPA? ■

Keith Eckel is a tomato, pumpkin, sweet corn and wheat grower from Clark's Summit, Pa.