



You Make the Call

A representative from Dow AgroSciences recently called my attention to Environmental Protection Agency (EPA) legislation that may affect your maintenance practices in the near future. The Food Quality Protection Act (FQPA), signed into law by President Clinton in 1996, has been called the most significant piece of pesticide and food safety legislation enacted in years.

The legislation sets forth new safety standards for all pesticide residues. According to EPA's Web site, www.epa.gov, FQPA seeks to establish "reasonable certainty of no harm" from chemical residue exposure. The law provides special protections for children, and requires that "an additional tenfold margin of safety for the pesticide chemical residue and other sources of exposure be applied to infants and children."

Previous legislation treated different uses of the same chemical independently. FQPA performs aggregate assessment of "all non-occupational sources of exposure, including drinking water, residential, and dietary exposure." The new safety standards assess cumulative exposure to pesticides and other substances with "common mechanisms of toxicity."

Tim Maniscalco, Dow AgroScience's manager of government and public affairs, told me his company agrees with the aggregate assessment principle in theory, but he questioned the validity of EPA's methodology. Maniscalco contends EPA uses "worse than worst case scenarios" to calculate risks posed by residential exposure. Interestingly enough, EPA seems to agree.

While the Agency looks to its extensive Pesticide Handlers Exposure Database to estimate applicators' exposure to chemicals, it lacks a similar tool to evaluate dangers for those who are exposed to pesticides, but who have not directly used them. Documents posted on www.epa.gov explain, "EPA's residential exposure assessments are designed to be as realistic as possible. They are, however, generally conservative and this adds an extra measure of safety when regulating pesticides. When scientists have studied people in the real world (including the children of farmworkers), they have generally found a person's exposure to be less than that predicted by our exposure assessments."

The document goes on to say the following:

- "We assume high amounts of pesticide residues will transfer to a person. Generally we assume 20-50% of the residues will transfer. Some techniques have shown that in some situations, only 1-3% of the residues are transferred. The highest reasonably possible transfer rate must be assumed for safety."
- "We assume no residue dissipation. In other words, all the residues available initially are available throughout the time a person is exposed. Dissipation rate is based on many factors (heat, sunlight, rain, etc.) so we must include the conservative prospect that in a given case there is no residue dissipation."
- "We assume that a person has no clothing on to protect themselves from exposure because little or no clothing is a possible realistic scenario in some circumstances."
- "We assume two to eight hours of continuous contact."

Residential exposure assessments will affect your program, since EPA includes chemical applications at schools and parks under the term. Organophosphate insecticides are currently being reviewed, and the agency is expected to release a preliminary risk assessment of chlorpyrifos this month.

EPA offers on-line public comment periods for its assessments, and it gives considerable weight to response. I urge you to take an interest in the process, and to lend your voice to the debate. The 60-day public comment period for chlorpyrifos should already be underway.

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Tip of the Month

Movable Soccer Goal Safety

by *U.S. Consumer Product Safety Commission*

There are between 225,000 and 500,000 soccer goals in the United States. Many of these are unstable and unsafe because they are either unanchored, or improperly anchored or counterbalanced.



Moveable soccer goals contributed to at least 21 deaths between 1979 and 1994. Between 1989 and 1993, U.S. hospitals treated an estimated 120 injuries that involved falling goals each year.

Most movable soccer goals feature metal construction, and weigh between 150 and 500 pounds. Many of the serious accidents occurred when equipment tipped over onto the victims. In most cases, the goals involved appeared to be homemade constructions of high school shop classes, custodial members, or local welders. These homemade goals often lack important safety features incorporated into professionally manufactured equipment.

Design and construction

A correctly designed goal must feature carefully balanced construction. A full-sized goal normally measures 24 feet (7.3 meters) wide and eight feet (2.4 meters) high. Goals are commonly six feet (1.8 meters) deep.

Soccer goal stability depends on several factors. One effective design lengthens the depth of the goal to counterbalance the structure. This strategy

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