

Analyzing R&D Equipment

By DAVID THOMAS

favor because of precedents in similar cases, including one involving the FFDCA and its prohibition on the use of cancer-causing color additives.

But NACA lawyer Steve Russell points out that the *de minimis* concept is a legitimate method for statutory interpretation by EPA that has been upheld by courts in other cases. "The question is whether the *de minimis* concept has been properly applied under the Delaney clause in the FFDCA," he says.

The appeals court ruling against EPA will probably spur Congress into action to forestall more drastic court-ordered mandates that could conceivably halt the sale of virtually all pesticides that have been shown to cause cancer in animals.

Although a consensus on legislation is still elusive, there appears to be ample room for compromise. Some observers believe agricultural interests may grudgingly accept more enforceable federal curbs on the licensing of carcinogenic pesticides, perhaps in return for a preemption of tougher regulation at the state and local levels.

The Supreme Court reaffirmed last year that FIFRA permits localities to

enact pesticide regulations unless prohibited by state law. But the chemical industry and pesticide user groups claim that a complicated patchwork of municipal restrictions is impeding commerce and has the potential to disrupt food production.

Noting that 83,000 municipalities are now free to enact their own pesticide regulations, NACA's Vroom says he would like to see uniform national standards that would preempt all state and local laws. The trade association is backing legislation sponsored by Rep. Charles Hatcher (D-GA) that would flatly prohibit local pesticide rules.

While the divergent interests involved in the debate generally agree the laws for food safety and pesticide use need to be tightened, Kansas lawmaker Roberts cautions, "We should be working to adopt policies that not only promote a safe, affordable and abundant food supply, but are flexible enough to allow for the evolution of science."

He adds, "If we do not work in this direction, we will simply be creating another 'Delaney Paradox' for future generations to struggle to resolve." III]

The analytical instrument field changed greatly during the 1980s. Microprocessors brought a reduction in size and often in cost while the data-gathering capabilities of the machines were multiplied. Every class of analytic instrument was affected. As *Chemical Business* noted just two years ago, "Manufacturers with better detectors, plentiful computing power, and a better understanding of chemistry, now offer more powerful ways of measuring properties." Now, how much room for improvement is left?

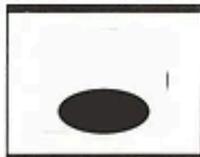
According to the researchers who use the equipment in the CPI's laboratories, there are still several significant changes and improvements that would be welcome. As Frank Santacana, director of scientific services for American Cyanamid Co.'s Stamford, CT, operations, sees it, "Though the sensitivity of the instruments has improved dramatically, there is a need for more specific detectors. The main thing is to improve the signal-to-noise ratio because one side-effect of instruments' enhanced sensitivity is that they detect all of the various impurities (background noise) that may be in a sample."

On the other hand, Tom Brotherton, an associate director of analytical and physical measurements with Danbury, CT-based Union Carbide Chemical Co., is concerned with the durability of the equipment in a plant or production environment. "Many of the analytical devices that we normally see in the laboratory," he reports, "are now being scrutinized carefully for suitability in plant environments. That is a quantum step for fragile laboratory devices, repackaging in a way that gives them the reliability that is required for integration into manufacturing."

"There is a tremendous need for analytical equipment and techniques like nuclear magnetic resonance which can analyze materials in the state in which they will be used rather than after having been melted or dissolved," says Gene Wilds, manager of corporate analytical

**IODINE
CHEMISTRY
EXCLUSIVELY**

DEEPWATER



IODIDES, INC.

Post Office Box 17599
Irvine, CA 92713
(213) 639-3355
(800) 854-4064
FAX (714) 751-1927

Circle 15 on Reader Service Card