

MARTIN PRAISES EPA'S USE OF CHEMICAL RELATIVE RISK ANALYSIS

Environmental Protection Agency found a new ally last week in Congressional chemist Rep. James Martin (R.-N.C.) who told a symposium at the American Chemical Society convention to "say a nice word about EPA now and then." Speaking at the ACS bi-annual meeting in Washington, D.C., Martin praised the agency on two counts.

First, he endorsed EPA's view on what he called relative risk assessment, e.g. that all chemicals that are toxic do not pose the same risk and should be treated differently. Martin said that it is not enough to prove that a chemical is toxic; you have to consider its relative potency and whether or not there is human exposure to it. Occupational Safety and Health Administration, with their "yes-no, plus-minus, black-white" approach to regulation, whereby all chemicals found to cause cancer in animals get the same regulatory treatment, is "obsolete," the Congressman said.

Secondly, he complimented EPA for taking great efforts to solicit and review public comments on the development of regulations, which is a sign that it is maturing, he said.

Schweitzer Sees Lack of Progress Under TSCA

Not all featured speakers at the ACS meeting viewed EPA in the same favorable light. The former director of EPA's toxic program, Glenn Schweitzer, voiced criticism over the agency's environmental commitment. EPA is failing in its duty to protect the environment, he said, because the agency's regulations issued under the Toxic Substances Control Act are "not designed to minimize environmental impacts."

Schweitzer listed four major areas of concern within EPA that should be addressed: 1) management lacks an understanding of its toxic leadership role; 2) EPA does not understand the chemical industry; 3) EPA concentrates too much on legalistic approaches toward toxic regulation; and 4) EPA fails to defend the environmental benefits of its toxic effort.

To improve the program, Schweitzer suggested forming a commission to review EPA's TSCA implementation; exempting small-volume chemicals from its rules; and assessing the costs of all TSCA regulations.

Researchers Find Flyash Free of Dioxin

Over 3,000 technical papers were presented at the ACS meeting. Highlights from papers on several toxic chemicals follow:

• In an apparent contradiction to Dow's report last year that dioxins are everpresent by-products of combustion processes, researchers from the University of California, Davis, reported that particles from coal-fired power plants do not contain dioxins in smokestack emissions. Brenda Kimble and Michael Cross said that they were unable to detect TCDD in the flyash using techniques designed to find the compound at one part per trillion levels. However, Dr. Christoffer Rappe from the University of Umea, Sweden, who has found traces of several dioxins in oil-fired incineration processes, told reporters later that the Davis researchers were looking for only one (TCDD) of several forms of dioxins and that they could have easily missed the higher chlorinated dioxins in their analysis.

• Male fertility in the U.S. may be declining as a result of exposure to toxic substances, Dr. Ralph Dougherty reported. Dougherty examined sperm densities in seminal fluid from 132 volunteers from Florida State University and found that 23% of the men were functionally sterile. According to Dougherty, a drop in sperm densities since 1929 from 100 million/ml to 20 million/ml today may be due to toxic compounds. He found pentachlorophenols, hexachlorobenzene, polychlorobiphenyls and DDT metabolites above background levels in the semen tested.

• PCBs carried in the water supplies on the surface of bacteria may pose a health hazard, according to the NUS Corp. of Pittsburgh, Penn. NUS reports that concentrations of chlorinated pesticides or PCBs can increase from 50-100% in water containing bacteria. The problem is that unlike other PCB absorbers, bacteria do not precipitate out of the water until colonies become grossly oversized; so in the meantime, the bacteria remain in the water and carry the chemicals all the way to the tap.