

1978. The other change establishes, on a permanent basis, three society committees—on budget and finance, publications, and Chemical Abstracts Service.

The commissions are a new concept for ACS. They represent a step toward decentralization of the power now vested in the board as they will have considerable responsibility, including some financial authority, delegated to them by the board. They will be made up mostly of council members, including some board members, and they will report to both board and council.

The science commission will be concerned with divisional and other scientific and technical affairs of the society; national, regional, and other meetings; expositions; nomenclature; science-oriented awards; and policy on ACS-administered awards. It will be made up of representatives from committees covering these areas. The education commission will perform a parallel function in its area. The new society committees represent a somewhat simpler concept—the amalgamation of current separate but overlapping committees of the board and council. The move is made to eliminate duplication and to give the council members involved in the new society committees a direct role in decision making in these areas, rather than the purely advisory role they now have through council committees. □

New EPA head plans hard look at chemicals

Less than two weeks after becoming head of the Environmental Protection Agency, Douglas M. Costle has made it clear that chemicals are one of his top priorities. At his first press conference last week Costle characterized implementation of the Toxic Substances Control Act as "one of the most difficult challenges and important priorities now facing EPA." And he announced that one of his first official actions has been to order an in-depth review of 15 chemical substances as a first step toward possible regulation. In addition, he says that next month the agency will propose regulations on both polychlorinated biphenyls and chlorofluorocarbons.

The 15 substances are: acrylonitrile, arsenic, asbestos, benzene, benzidine, cadmium, hexachlorobenzene, lead, mercury, phosphates, polybrominated biphenyls, polynuclear aromatic hydrocarbons, trichloroethylene, Tris (a flame retardant), and vinylidene chloride. For each of these, Costle says, there "ex-



Costle: minimal risks are inescapable

ists significant evidence of injury to human health or the environment, enough to trigger a presumption that some regulatory action will be necessary." Many of the substances are known or suspected carcinogens. Others have been linked to organ damage, skin or respiratory diseases, or nerve disorders. Only phosphates apparently pose a purely ecological threat.

EPA's examination, Costle says, will include an assessment of the hazards associated with the particular substance, a review of the sources of the chemical or the circumstances through which the hazard is produced, a study of possible substitutes and their expected environmental and economic impact, and assessment of possible regulatory action. Costle hopes to have the examinations completed within a year.

This action is necessary, Costle says, because "we have neglected the subtle but lethal effects of chemicals for decades. Now we must extend the frontiers of scientific knowledge to evaluate what those risks really are and find ways to bring them under control. We must act in haste but not in panic." He adds that EPA "must recognize that minimal risks are inescapable," but says "society must take any needed precautions to prevent the occurrence of silent epidemics of cancer and other health risks."

Reaction among the chemical industry to Costle's announcement can best be described as calm. It's not "overly surprising," says Dr. Fred Hoerger, manager of regulatory and legislative affairs for Dow Chemical, pointing out that EPA has been studying most of the substances for several years. He adds that he hopes EPA will consider each on a case-by-case basis, since it will take a lot of data on each to come up with a ratio-

nal regulatory approach. And a spokesman for Monsanto says that the company is "pleased" that EPA has formally begun work reviewing the safety of chemicals under the toxic substances act. The company says it hopes that "EPA will make full use of existing chemical industry knowledge about the substances during its review." □

N-nitrosamines found in toiletry products

The latest potential health hazard to be unveiled caused a stir in New Orleans last week as TV and newspapers proclaimed *N*-nitrosodiethanolamine to have been found in a number of toiletry products—cosmetics, hand and body lotions, and shampoos.

Although the compound belongs to a class of known animal carcinogens, the hazard to man from the toiletry products is at present questionable. *N*-nitrosodiethanolamine causes liver tumors in rats. However, such studies involve ingestion, not absorption through the skin.

Speaking at the 173rd National Meeting of the American Chemical Society, Dr. David H. Fine of Thermo Electron Research Center, Waltham, Mass., said the *N*-nitroso compound found in the toiletry products probably results from nitrosation of di- and/or triethanolamine emulsifiers by a nitrite compound. Where the nitrite impurity comes from isn't known, he said.

Fine and his coworkers at Thermo Electron carried out their analyses using high-pressure liquid chromatography. *N*-nitrosodiethanolamine was also isolated from Fine's samples and identified by Dr. Klaus Biemann's group at Massachusetts Institute of Technology using high-resolution mass spectrometry.

The possibility that a significant amount of the compound may be absorbed through the skin is not unreasonable, Fine says, since triethanolamine is a wetting agent. For example, Fine points out, it is used industrially to increase penetration of organic liquids into wood.

N-nitrosodiethanolamine was found in analyses of about 30 products to range from 1 ng per gram (ppb) to a high of about 48,000 ng per gram. Among the products with comparatively high *N*-nitrosodiethanolamine contents were Max Factor Ultralucet Whipped Creme Makeup (48,000 ppb), Revlon Moon Drops (3700 ppb), Helena Rubinstein Silk Fashion (1200 ppb), Clairol Herbal Essence Shampoo (260 ppb), Scholl Rough Skin Remover (140