

Toxic Substances Control Legislation: The History and Status

by Stephen Altman

In the long history of progress toward a toxic substances control act, Congress is now closer than ever before to passing legislation to better protect the American worker and to provide more extensive information on which to base regulations.

By now, of course, you've heard the names. Asbestos. Vinyl chloride. PCB's. BCME. Arsenic. Mercury.

There are others. Each is a toxic substance, and each came into widespread use before its capacity to do harm was fully recognized. If you've heard their names recently, and been alerted to the tragedies and potential tragedies they represent, so have many other Americans, and so has the Congress.

In fact, public sensitivity to the problem of toxic substances has never been higher. That's the main reason why the 94th Congress may succeed where the last two have failed. By the fall, it may deliver to the President a Toxic Substances Control Act.

Federal regulations already cover food additives, drugs, cosmetics, pesticides, and to a greater or lesser extent pollutants in the air, water, and workplace. But as John Quarles, Deputy Administrator of the Environmental Protection Agency (EPA) told a House panel last summer, "Our patchwork defense is woefully inefficient and ineffective." A toxic substances act would place a closer watch, and stricter controls as well, on the whole spectrum of metals, metallic compounds, and synthetic chemicals which enter the nation's commerce each year. The reasoning is simple enough: The more we know about hazardous substances before they reach production and use, the better we can protect ourselves against the dangers they may entail.

Strike one, strike two

Congress became aware of the need for toxic substances legislation back in April of 1971,

when a report on the subject was issued by the federal Council on Environmental Quality (CEQ). The report estimated that at that time there were more than 1.8 million known chemical compounds, many thousands of which are in use and production. But not all of these substances, of course, are toxic; the problem is in ascertaining early enough the health and environmental implications of their use. The report pointed out that while more than 1,000 widely used compounds are known to be harmful in large doses, the environmental impact of most substances is not well understood. Each year the problem becomes more complex, as an estimated quarter million additional substances are developed, of which more than 300 eventually find their way into commercial production. Chemical testing, though, largely confined as it is to the effects of short-term, large-dosage exposures, leaves us inadequately prepared for the effects of the chronic, low-level exposures which are likely to occur in the environment. Too many chemicals, said CEQ, are entering the nation's commerce, and being applied to a growing diversity of uses, without adequate screening in advance. We cannot, it said, "continue to allow the entire population or the entire environment to be used as a laboratory."

Within a year of the report, both houses of the 92nd Congress were considering toxic substances control measures. The Senate passed its version unanimously; the House its own by a vote of 240-61. But the bills were different, the Senate measure being the much more rigorous of the two, and no House-Senate conference committee was called to arrange a compromise.

The next Congress brought the same dilemma: Each house passed its own version of the bill. The key difference lay in the crucial area of pre-market notification. The Senate bill required that the Administrator of EPA be notified of each new chemical substance no less than 90 days before commercial production. EPA would then determine whether the manufacturer must provide testing information to assure the safety of the chemical, and if so, what kind. The House version, however, required the Administrator to formulate a list of substances deemed likely to pose "an unreasonable risk" to health or the environment. Manufacturers would then have to notify the Administrator and provide test data only about compounds already judged to be hazardous.

Another sticking point was the very status of the new legislation among such other environmental and health statutes as the Clean Air Act, the Water Pollution Control Act, and the Occupational Safety and Health Act. The House bill called for exhausting all other remedies—laws already on the books—before resorting to the new toxic substances regulations. The Senate bill said that, in each specific case, all relevant statutes should be considered and the most effective one applied.

This time a House-Senate conference committee did meet to find some blend of the two bills. But neither side, as it turned out, would yield on important issues. House conferees were unwilling to endorse unlimited pre-market screening; Senate members preferred no bill to what they considered a weak one. So there was no bill.

Another try

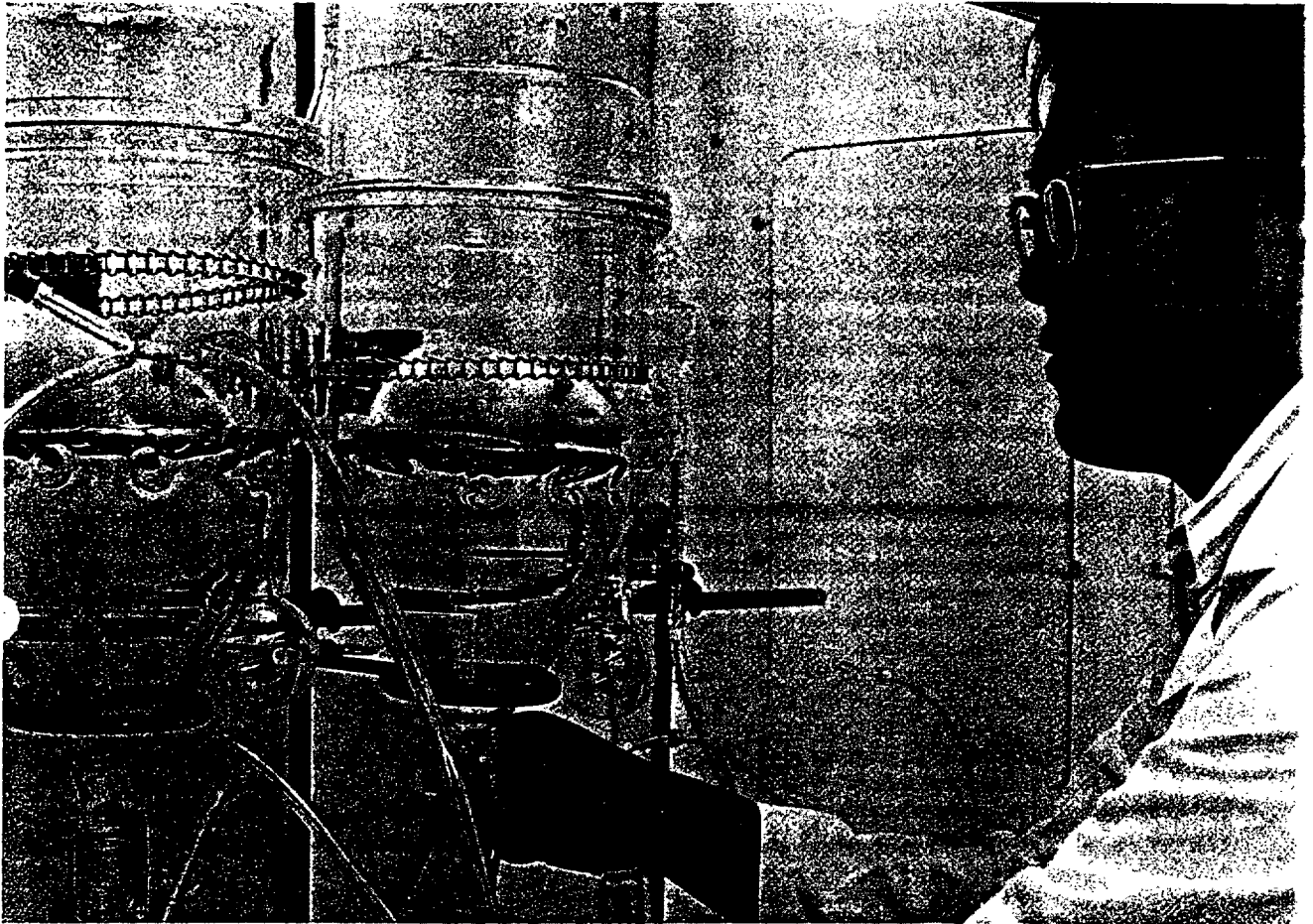
The drive in Congress to enact toxic substances legislation did not die. In fact, as more chemical hazards came to light—vinyl chloride being merely the most notorious—the legislation's proponents found their support growing stronger. As one Senate staffer puts it, "Such revelations are always sad to see, but let's face it: They've awakened the public to the urgent need for this sort of measure."

At hearings held on the House and Senate sides last year, the Administration made its own support plain. As EPA's John Quarles told the House Subcommittee on Consumer Protection and Finance last July, "The two chief weaknesses in our approach today are: first, that we

do not have effective authority to impose controls on the chemicals and, second, that we do not require adequate testing of them early enough to discover what sorts of problems may be posed by the chemicals. The toxic substances control legislation that is before you would address this problem in a way that would put us into a much sounder position to handle the difficulties that we face." Spokesmen from the National Institute for Occupational Safety and Health (NIOSH) and the National Cancer Institute (NCI) said much the same thing, and CEQ Chairman Russell W. Peterson added that "In my view, this legislation is among the most important now pending before Congress."

Administration supporters of the legislation are part of a growing crowd. As that Senate staff member says, "The number of groups who have become interested in this legislation and are actively working for it has picked up enormously with this Congress. In previous sessions, the Sierra Club was the key environmental group working for this bill. Today there are many, Environmental Action being high up on the list. The health groups are starting to come on board, too—the March of Dimes, for instance, and Blue Cross-Blue Shield, the American Public Health Association, the American Lung Association, and many others. And then, of course, there's labor."

Representatives from the AFL-CIO, its Industrial Unions Department, and the United Steelworkers were prominent at the House and Senate hearings. Labor has backed some sort of toxic substances act throughout its legislative history, but only in the last year or two have unions very actively worked to ensure passage. The reason is a shift in perspective: Whereas labor long considered the bill a purely environmental measure, it has come to recognize the significance to occupational health. Since 1971, the federal agency primarily responsible for worker safety and health has been OSHA, but as the United Steelworkers' John J. Sheehan told the House Subcommittee, OSHA "does not control toxic substances until such time as they are entered into the workplace. It is that void that we wish to see plugged, and a toxic substances act will do that." It would also, as Sheehan pointed out, provide EPA with another specific power which OSHA lacks—the power to restrict or altogether prohibit the manufacture of a hazardous toxic substance.



Qualified support

The chemical industry itself now supports toxic substances legislation "in principle," although it has long contended that new substances are already extensively tested, and that toxic substances in general are already adequately regulated by existing statutes. The industry also has voiced fears of the sort of broadened government control which it feels would inhibit innovation and production, force smaller firms out of business, cost jobs, fuel inflation, and hurt the nation's balance of trade.

No two parties, in fact, seem to be able to agree on the potential economic impact of a toxic substances act. The Manufacturing Chemists Association (MCA), whose 185 members represent more than 90 percent of the nation's chemical production capacity, sponsored one study last year by an economic consulting firm, Foster D. Snell, Inc. The Snell report estimated the annual cost to the chemical industry would range between \$358 million and \$1.3 billion, depending upon the scope of both the toxic substances act and EPA's administrative policies. Dow Chemical had already predicted a yearly

cost of \$2 billion. EPA had first placed its estimate at \$45 million, then raised it to somewhere between \$80 million and \$140 million annually.

One reason why cost estimates vary so greatly is that no one is sure of how many chemicals would require testing each year. EPA estimates that about 1,000 new substances reach the marketplace annually; industry estimates reach six or seven times as high. Of that number, and of the chemicals already in production, just how many would require testing is not certain. As MCA president William J. Driver says, "Basically, we agree with the government people on the costs, in terms of upper and lower limits, of testing a specific chemical substance. The big question is the number of such substances to be tested—you get a difference of opinion when you try to estimate what that multiplier will be."

The various versions of the legislation have differed in this very area. All have upheld the principles of pre-market notification and testing requirements, but they have differed in the scope and detail of their application. The chemical industry has pressed for a scrupulous definition of the Administrator's authority to require noti-

fication and testing of harmful substances. "We have favored toxic substances legislation," Driver says, "provided it was written in language specific enough so that we knew exactly what was intended and just how it would be exercised, and so that it was aimed at specific risks as distinguished from mere conjecture or possibilities of risk." MCA endorsed the bill passed in the last Congress by the House of Representatives, and at present favors the version introduced last year by Rep. John Y. McCollister (R-Neb.), which once again calls for the Administrator to formulate a list of chemical substances or specific uses of substances that "are likely to pose substantial danger to health or environment," substantial danger being defined as an unreasonable risk of death, of widespread or severe personal injury or illness, or of widespread or severe harm to the environment. Pre-market notification requirements would be limited to substances appearing on the list. To require the testing or regulate the use of a substance, the Administrator would have to deem such a ruling "necessary to protect against unreasonable risk to health or the environment."

Versions of the legislation which provide for broader pre-market notification or broader discretion on the part of the Administrator in requiring testing and applying controls have been vigorously opposed by the chemical industry as excessive and unnecessary. "The chemical industry," Driver says, "has for many years been dealing with toxic substances and for the most part has a really high record of safety in this regard. It's very sensitive to its responsibilities; if you will, just consider the legal liabilities that attend the introduction of a new substance in the marketplace. One cannot at all approach that lightly." Driver attributes most health problems that have arisen from toxic substances to unforeseeable actions or mistakes in the use or application of specific chemicals. "This sort of thing will probably continue forever," he says. "No amount of regulation can absolutely settle or make safe for all time the production and use of chemical substances."

Why, then, would the chemical industry support any sort of new controls? "Well, I think it's something whose time has come," Driver says. "There is a legislative history of better than four years on this subject with a good deal of loose talk in the press, even to the point where some people have erroneously stated that there are no controls on toxic substances—so

that in our opinion the new legislation would help set straight a lot of misinformation. It would also establish in the minds of a lot of people the parameters of the controls which government would and should exert in regard to toxic materials. And since it would regulate some things from the standpoint of law, it would certainly furnish a better platform on which to discuss the issues with government regulators at the state and federal levels."

Administration's stand

Of the four toxic substances control bills pending last year before the Congress—one in the Senate and three on the House side—the Administration last November announced support of H.R. 7664, the McCollister version as the bill most closely in accord with Administration policy. This came after a reassessment of the Administration's earlier stand in support of S. 776, the Senate measure introduced by Sen. John Tunney (D-Cal.). The Tunney bill was essentially the same which had passed the previous Senate, differing most significantly from the McCollister bill in that it provided for much broader pre-market screening. The Administration's current position endorses legislation which would:

- provide for the control of toxic substances to the greatest extent possible through existing regulatory authorities;
- empower EPA to obtain information from manufacturers that would facilitate the control of these substances;
- require that pre-market notification requirements and the exercise of new regulatory powers focus only on those chemicals and chemical families determined to pose an unreasonable risk to health or the environment.

Support for H.R. 7664 as the appropriate vehicle to achieve these goals, however, hinges on the adoption of certain modifications to the bill to "improve the effectiveness of administration of the legislation by EPA." The suggested changes were developed with input from EPA, CEQ, DOL, HEW, the Department of Commerce and OMB. Some adjustment to the pre-market screening area of H.R. 7664 was among the changes. That bill would require the Administrator to formulate a list of substances that "are likely to pose substantial danger"; the Administration recommends the words "may pose an unreasonable risk." The old language provided for testing or regulation only where "necess

to protect against unreasonable risk"; this would be changed to "when there may be an unreasonable risk."

These are small but crucial changes in wording. With them, the Administrator of EPA would still have to provide a specific list of hazardous substances to be screened, but the range of substances he could include on that list would be greatly broadened. The Administrator would also gain the authority to require testing when there simply are insufficient data to determine risk, and further, be allowed to call for test data without having to prescribe specific testing protocols or procedures.

He could also, given another modification proposed by the Administration, issue a final ruling on a chemical without providing a detailed statement on the expected economic impact of that ruling. Instead, he would merely have to take such effects into consideration while developing the ruling.

There are many other proposed modifications in the Administration's package, most of which are incorporated in the bill as reintroduced by Senator McCollister this session. In general, the Administration's suggestions tend to bring the McCollister bill more in line with the version currently under review in the House, and in fact already passed in the Senate. After hearings last year before the Subcommittee on Consumer Protection and Finance of the House Commerce Committee, Rep. Bob Eckhardt (D-Tex.) and Rep. William M. Brodhead (D-Mich.) withdrew their versions of the legislation and Eckhardt introduced H.R. 10318, with Brodhead and Subcommittee Chairman Rep. Lionel Van Deerlin (D-Cal.) as co-sponsors. A corresponding measure was soon under consideration by the Senate Commerce Committee Subcommittee on the Environment, was unanimously approved by the Senate Commerce Committee itself, and by March 26 was passed by the entire Senate by a vote of 60-13. Meanwhile, the House Subcommittee marked up the bill and brought it before the entire House Commerce Committee. The significant development here is that, for the first time in the legislative history of the toxic substances control act, House and Senate measures are very nearly parallel. And if both these measures are passed this session, the task facing a new House-Senate conference committee will be much less formidable than it has been in the past.

H.R. 10318

Given the growing support in the Congress for these versions, it might be worthwhile to outline their contents. Here, then, is a brief overview of H.R. 10318, whose provisions, by and large, are mirrored by the Senate version, S. 3149.

The bill proclaims that it is the policy of the United States that hazardous and potentially hazardous chemical substances should be adequately tested, and that such testing should be the responsibility of those who manufacture and process such substances. It states further that adequate authority should exist to regulate chemical substances which cause or contribute to an unreasonable risk to health or the environment, but also that such authority should be exercised in a way not to impede unduly technological innovation or to create unnecessary economic barriers for industry. The Administrator of EPA is to carry out the act "in a reasonable and prudent manner" and "shall consider the environmental, economic, and social impact" of any action he may take. The Administrator is empowered to issue rules requiring the manufacturer or processor of any potentially harmful chemical substance to conduct tests on that substance. The bill does not, however, cover tobacco and tobacco products, pesticides, nuclear materials, foods, drugs, or cosmetics. Before the Administrator may issue a rule requiring the testing of a chemical, he must make three specific findings:

- that the chemical may cause or contribute to an unreasonable risk to health or the environment or that there may be substantial human or environmental exposure to the chemical; and
- that there are insufficient data available upon which to determine or predict its health or environmental effects; and
- that testing of the chemical is necessary to develop such data.

Any rule to require testing must specify who will perform such tests, identify the compound or mixture involved, specify standards for the development of test data, and provide a time period within which the data must be submitted. "Standards for the development of test data" include whatever information the Administrator may require concerning the health or environmental effects as well as all pertinent characteristics of the chemical being tested. To whatever extent is necessary to ensure the adequacy and

reliability of the test data, the Administrator may prescribe testing protocols or procedures which the manufacturer or processor must follow. At least once each year, the Administrator must review the adequacy of the standards for the development of data which he has prescribed.

The bill also establishes an advisory committee composed of one representative from each of seven federal agencies having research or regulatory responsibilities involving chemicals: EPA, CEQ, OSHA, NIOSH, the National Institute of Environmental Health Sciences, the National Cancer Institute, and the National Science Foundation. Within a year after the passage of the bill, the advisory committee must submit to the Administrator a list of chemical substances and mixtures for which he should issue testing re-

quirements. The list must be reviewed and revised every six months thereafter. Within a year after any substance's appearance on the list, the Administrator must either begin proceedings to issue a testing requirement, or publish in the *Federal Register* his reasons for not doing so.

Chemical manufacturers must notify EPA no less than 90 days before the manufacture of any new chemical substance, or the manufacture or processing of any existing chemical for a use which the Administrator has determined, by rule, to be a significant new use. The notification must include a variety of information: the name of the chemical; its chemical identity and molecular structure; the proposed categories of its use; an estimate of the amount to be manufactured; the byproducts resulting from the manufacture, processing, and disposal of the chemical; and any test data the manufacturer may have relating to the health and environmental effects of the substance. In addition, if the Administrator has already issued a ruling to require that the chemical undergo testing, the manufacturer must submit the required test data along with the other information. If the chemical is on a list of chemicals the Administrator has determined may cause or contribute to an unreasonable risk to health or the environment, but no specific testing requirement has been issued, the manufacturer must submit data he believes show that the chemical will not in fact pose a hazard.

There is a significant exception to the notification requirement: It does not apply to chemicals manufactured in small quantities for scientific experimentation or for chemical research or analysis, including research or analysis for product development.

Regarding any substance or new use that is subject to notification, the Administrator may put into immediate effect a rule prohibiting or limiting the manufacture of the substance if he makes two findings: that information available to him is insufficient to permit a reasoned evaluation of the health or environmental effects of the chemical, and that in the absence of such information, the chemical may cause or contribute to an unreasonable risk to health or the environment.

In general, the Administrator is empowered under the bill to issue rules to prohibit or limit the manufacturing, processing, or distribution of any chemical which "causes or contributes to,



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or is likely to cause or contribute to, an unreasonable risk." He may also order labelling of specific substances. As with rules to require testing of chemicals, the Administrator's rules to control substances must be issued in accordance with the orderly procedures of Section 553 of Title 5 of the United States Code, except that the bill provides for the opportunity for an oral hearing and, in certain instances, the cross-examination of witnesses. A proposed rule, however, may be placed into immediate effect upon its publication in the *Federal Register*, if the Administrator feels that a particular substance or mixture is likely to result in an unreasonable risk before the usual rulemaking proceedings could be completed, and that such action is necessary to protect the public interest.

The Administrator may also order a manufacturer to revise quality control procedures if the manufacturer's present procedures unintentionally result in allowing a chemical to cause or contribute to an unreasonable risk. Before the Administrator may issue any such ruling, however, the manufacturer must be given a full adjudiciary hearing.

H.R. 10318 also includes reporting provisions intended to help EPA keep track of all chemicals in production around the country. The Administrator must issue rules under the legislation requiring the manufacturers and processors of chemicals (not just new chemicals) to report for each the name, chemical identity, uses and proposed uses, estimates of amounts produced, description of byproducts, adverse health and environmental data, and estimates of the number of workers exposed. Manufacturers of mixtures and research chemicals must submit this data only to the extent the Administrator determines is necessary to efficiently enforce the act.

The reporting provisions would allow the Administrator to compile an inventory of all chemicals in production, as opposed to the situation today, when no one is certain of the number or variety of chemicals used and produced.

The bill also provides that manufacturers, processors, and distributors of chemicals retain records of adverse reactions in health or environment caused by any chemical substance. Further, the Administrator may require a manufacturer to provide a list of all safety and health studies performed on a chemical. If any manufacturer receives information indicating that a chemical causes or contributes to an unreasonable risk, he must report that information to EPA.

Other provisions of the bill allow for the protection of trade secrets, define the new legislation's position among other statutes administered by EPA and other agencies, and provide for civil actions on the part of citizens.

If the summary of the bill seems long, the bill itself is much longer—stretching, in fact, over more than 80 pages. This proposed toxic substances bill reflects an effort on the part of its proponents to provide broad yet well-defined screening and regulatory powers at EPA. This is the legislation already passed by the Senate and in the version with the greatest backing in the House committee concerned with the issue; but whether this bill, or the McCollister bill, or some other version, or no version at all will be passed by the entire Congress and signed into law this year remains to be seen.

No cure-all

What would a toxic substances act mean for OSHA? For one thing, it would mean that more substances than ever before would be tested before entering the workplace. And that testing would alert OSHA to the possible need for standards to protect the worker. Furthermore, reporting requirements of new legislation should supply OSHA with the sort of figures which have been all too hard to come by in the past, particularly those regarding the number of workers exposed to particular substances. A requirement that health and safety studies and records of adverse reactions be open to EPA would make available to OSHA the most up-to-date information possible regarding potential chemical hazards. All of this would make OSHA's job just a little easier, and improve its capacity to guard against on-the-job health problems.

The trouble with any toxic substances act, however, is that it can't do everything people would like it to do. Everyone would like it to erase the incredibly complex problem of human and environmental exposure to toxic substances, but it can't do that. No legislation can suddenly make perfect the developing science of toxicology, or make the use of chemicals less vital to society, or make substances which are toxic less toxic than they are. It could, however, encourage science and industry to strive to better contain chemical hazards, learn more about the substances produced and used, and provide the government with far better knowledge on which to base regulation of toxic substances.

Mr. Altman is a free lance writer.

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