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COVER: Cuddled up in a well-stocked safe, Chicken Little may ignore falling skies and trembling earth. This fellow was preparing to survive the end of the world predicted by the Millerite sect for 1844. The world has seldom lacked what James Thurber called "get ready men." The latest variety is telling us to get ready for a "syzygy" of all the planets, which, they say, will cause all kinds of calamities. See p. 142. (Illustration: Bettmann Archive)

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Thumbs down on formaldehyde insulation

One commissioner said she had not slept the night before the final vote. "In my nearly four years on this commission," explained Edith Barksdale Sloan of the U.S. Consumer Product Safety Commission (CPSC), "I have never been faced with an issue so riddled with complexities as the one before us today."

The issue was whether the CPSC should ban further installations of the once widely sold urea-formaldehyde foam insulation on the grounds that the product "poses an unreasonable risk of injury to consumers." When the official ballot was cast last week, Sloan and three other CPSC officials voted to finalize such a ban, which could take effect in about five months. Only one commissioner, Stuart M. Statler, voted against the ban. If this four-to-one resolution is not overturned or revised by congressional or court action, then it means the end to an industry that reached its peak during the energy crisis of the mid-1970s.

At that time, consumers were encouraged to keep homes as "tight" as possible to conserve energy; insulating with the easily installed, low heat-conducting urea-formaldehyde foam was one method of achieving this. The insulation—composed of the urea-formaldehyde resin, a surface-acting agent and a propellant—is generated on-site and pumped into air spaces through small holes drilled in exterior or interior walls. The resulting foam first has the consistency of whipped eggs and then rapidly hardens.

At least 1.5 million persons live in about the one-half million U.S. homes insulated with this type of foam. Since the insulation became popular, CPSC has received complaints from some 6,000 of those persons. Most of the complaints mention various health problems—such as headaches, eye irritations, nausea and respiratory ailments—that most experts agree can be caused by escaping formaldehyde fumes. Moreover, when CPSC began to investigate these complaints, it discovered that some researchers believe formaldehyde gas also poses a cancer threat. This claim of potential carcinogenicity is one of the major components of the highly emotional urea-formaldehyde (U.F.) foam insulation controversy.

The controversy first became widely publicized about a year ago when the CPSC proposed the ban (SN: 2/14/81, p. 110). But the commission received comments from formaldehyde industry representatives that criticized the proposal and raised complex scientific questions that the CPSC could not adequately address. Consequently, the commission extended the deadline for a final vote in order to gather more data.

Studies from which CPSC has drawn more information for its revised assessment of the situation are described in the Nov. 18 FEDERAL REGISTER. One of the studies, conducted at Oak Ridge National Laboratory under the direction of CPSC's Joseph Z. Fandey, involved applying foam to panels that simulate actual walls. The research indicated that U.F. foam insulation releases formaldehyde for long periods of time after initial foaming (16 months in the test period), "even though some of the panels were foamed under controlled conditions in accordance with manufacturer's recommended practices."

Other data used in CPSC's revised risk assessment came from a Chemical Industry Institute for Toxicology study of formaldehyde gas-induced cancer in test animals. Research results from this study include the development of cancer in animals tested at a 5.6 parts per million formaldehyde level.

Such data combined with previous information spells "a problem of health and safety of life-and-death magnitude," Commissioner Sam Zagoria said. "What we do here today may decide whether 20 to 25 years from now a number of Americans will be struck down by and die prematurely of cancer," he said before he voted for the ban.

After the vote, Josh Lanier of the National Insulation Certification Institution (NICI) said CPSC's actions are an example of "regulatory hysteria in total defiance of the facts gathered." Homeowners who have installed the controversial product, "the overwhelming majority of whom have never had a problem of any kind with U.F. foam insulation, stand to lose up to \$20,000 each in . . . loss of resale value of their homes," he said. NICI members now plan to sue the commission in a federal court and to urge Congress to replace the ban with a call for voluntary installation standards and consumer programs.

Said commission Chairman Nancy Harvey Steorts, a Reagan appointee who has a reputation for frequently voicing opposition to mandatory standards and bans, "I have concluded that no standard—voluntary or mandatory—can assure the consumer of an installation . . . that will adequately reduce the risk of formaldehyde off-gasing."

The commission staff now is investigating another source of formaldehyde gas—the adhesive in particleboard and plywood. While regulatory standards might ensure low gas release from these products, says one CPSC staff member, in the case of formaldehyde insulation—a product generated on site—"there is little opportunity for quality assurance."

—L. Garmon