



In Wisconsin these warning labels must be affixed to all mobile homes up for sale.



Steorts: Inform the public, resolve complaints.

hyde producers and wood-products companies are facing an enormous wave of suits filed by homeowners who claim that their health problems were caused by formaldehyde fumes. And in the absence of federal regulation, two states have adopted standards of their own.

Although no one is predicting a ban of any sort, CPSC could adopt a national standard governing formaldehyde emissions from plywood, particleboard and other products where formaldehyde is used as an adhesive. CPSC Commissioner Nancy Harvey Steorts is also eager to develop a program to resolve consumer complaints and inform the public about formaldehyde's potential hazards. **Voluntary cuts.** But industry leaders from the Formaldehyde Institute, the Hardwood Plywood Manufacturers Assn. and the National Particleboard Manufacturers Assn.—who claim they've reduced emissions by 60-95% over the last few years—hope to persuade CPSC that their voluntary standards have already accomplished whatever the CPSC might dictate. "The market shift is to low-emission urea formaldehyde resins," declares C.T. Howlett, Jr., vice-chairman of the Formaldehyde Institute, who is also environmental, health and safety coordinator for Georgia-Pacific. "It's not yet complete, but it's moving in that direction."

Howlett says some adhesives manufacturers have reduced the ratio of free formaldehyde and urea in resin, and wood-products producers often follow up by introducing chemical "scavengers" that bind with the remaining free formaldehyde. But most manufacturers are unwilling to discuss the details of their processes for fear of leaking trade secrets in this highly competitive atmosphere.

'Formaldemania.' More threatening to formaldehyde producers and their customers is the enormous volume of litigation involving formaldehyde products. Industry lawyers refer to these suits as "formaldemania."

In addition to several hundred formaldehyde-foam cases, perhaps as many as 1,000 court cases have been filed by homeowners who trace their health problems to the formaldehyde used as an adhesive in plywood and particleboard in their houses or mobile homes. According to Marc G. Kurzman, a Minneapolis lawyer whose firm is representing plaintiffs in 45 formaldehyde cases, more than 2,000 such cases are

pending in the U.S., with more filed in Canada—2,500 in Quebec province alone, Kurzman says.

Damages. So far, the largest settlement involving foam was \$275,000 awarded in a New Jersey case. In Denver, a judge awarded \$510,000 in punitive damages to a couple who claimed their health problems were caused by formaldehyde fumes released by the wood products in their mobile home.

Unwilling to await the legal outcome, Wisconsin and Minnesota have adopted standards of their own. Wisconsin has enacted a standard for new mobile homes, setting a maximum level for formaldehyde of 0.4 ppm in fumes. Minnesota has established a 0.5-ppm standard that covers all new homes.

Mobile-home buyers in Wisconsin must receive a presale warning notice explaining that some building materials and other products in the home may emit formaldehyde fumes. And a warning label must be affixed to the mobile home informing the homebuyer that the concentrations of formaldehyde in the products are regulated.

California and Texas are reportedly exploring adoption of a standard for homes. In Kentucky—where 10% of the population lives in mobile homes—the state legislature voted down a proposal for a mobile-home formaldehyde standard. But state representative Herbert Deskins vows to propose his bill again next session, declaring, "If the federal government doesn't come up with that kind of standard then the state of Kentucky will." □

Health at the bargaining table

When management and labor sit down to hammer out a new contract, money and "givebacks" are usually the major issues for the chemical industry. But this year, the International Chemical Workers Union (ICWU) is also making a concerted effort to emphasize health and safety in negotiations.

As part of that effort, union leaders stressed health- and safety-related concerns at last week's annual convention in Las Vegas. Union members have expressed greater interest in these issues in the past few years, says ICWU health and safety specialist Richard Lewis, "and now they're ready to move." As ICWU President Frank D. Martino has said, the union deals "with on-the-job issues as our primary goal," including health and safety.

The movement is not likely to be an all-out effort, however. In Lewis' view, less than half of the locals representing ICWU's 65,000 members may be ready to emphasize health and safety issues at contract talks. Nonetheless, the union will work to see that those matters are brought up at the table.

ICWU seeks three specific goals within each chemical company. The first is to form joint health and safety committees with management. The second is to educate and train leaders of these committees. And third, the union wants members to exercise their rights under existing "right-to-know" regulations.

Equal voice. Most important is achieving joint participation in decisions on health and safety issues. The union, for instance, wants an equal voice in decid-

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ing with the company what tests will be used in medical-screening programs.

The union has supported such demands in individual cases brought by locals. A number of the cases have involved pesticide producers. One, which the union now considers "totally corrected," involved workers of Local 900 at a Du Pont plant that produced the pesticide methomyl carbamate. Workers exhibiting exposure symptoms were treated with the antidote atropine sulfate, but the union was concerned that the antidote might not prevent later development of chronic symptoms.

Few cases. According to Du Pont, the antidote is given only under a physician's orders, and symptoms subside quickly. The company's medical department notes that if the antidote were not completely effective, symptoms would recur after the first dosage wore off. The question the doctors were often asked, Du Pont's medical department notes, was, "Do the mild symptoms mask more severe signs?" Says one doctor: "Our experience is that it doesn't happen."

Other efforts by ICWU involve workers' right to know. The union was involved in the efforts of Local 61 at a plant in Greenbush, N. Y., where Sterling Organics, part of Sterling Drug, filtered and purified Phosmet organophosphate for another company. The lo-



Martino: Health and safety are primary issues.

cal filed a complaint about the blood-testing program with the National Labor Relations Board, contending that workers were not given test results. The union ultimately obtained the results by having workers sign releases that allowed records to be turned over to a doctor advising the union.

In compliance. Sterling Organics notes that a visit by the Occupational Safety and Health Administration the year before the complaint found the company to be in compliance on Phosmet. Briefs filed by the company during arbitration, Sterling says, asserted that the employ-

ees affected had four opportunities to comply with company requests. Workers refused to take the blood test, and were disciplined with one-day suspensions without pay, the company says. Tests have been made every three months for chemical operators, and results have been released to operator within OSHA's time limits.

Besides bargaining with companies, union leadership is actively advising states and local governments on ICWU views on right-to-know laws and rules. Recent efforts, says Lewis, include working with the states of Illinois and West Virginia on a draft program involving right-to-know rules. Similar efforts are being made in Akron, O., the union's home, and with hearings before the New Jersey legislature.

A Nobel for developing electron microscopy

The Nobel Prize had been bestowed six times on scientists hailing from the prestigious Laboratory of Molecular Biology at England's Cambridge University. The seventh in the succession came last week. As Aaron Klug was about to leave home for his job at the university, he received a telephone call from Stockholm, advising him that he had been awarded the Nobel Prize in Chemistry. Asked how he responded, Klug said that he was "a little numbed."

In awarding the \$157,000 prize, Klug, the Swedish Academy of Sciences cited the 56-year-old scientist's "development of crystallographic electron microscopy and his elucidation of biologically important nucleic acid-protein complexes." Bo Malmstroem, chairman of Nobel's selection committee for chemistry prize, says that Klug was honored "not only for developing [advanced] electron microscopy systems but also for using it."

According to Malmstroem, who is professor of biochemistry at Gothenburg University in Sweden, electron microscopy has long been used to develop two-dimensional images of biological objects. But because organic molecules consist mainly of light atoms, he says the images lacked contrast. Better contrast could be achieved by increasing exposure, which, however, also increased the risk of radiation damage to the organic structures. Even the preferred method, staining with heavy metals, could distort the image.

But Klug has produced high-resolution images of biological structures

Chemical stocks ride high in a bull market

Chemical stocks are riding high in the bull market that has propelled the Dow Jones Industrial Average (DJIA) to a 10-year high. Stock prices of the top 10 chemical companies have soared an average of 35.5% in the two months since the rally ignited this summer (table).

Shortly before the close of trading last Wednesday, the DJIA reached 1034.12, just shy of the 1039.36 mark set on Jan. 12, 1973. The next day, after retreating in the early hours of trading, the DJIA rose once again, this time 2.86 points, to close at 1036.98.

The DJIA had dropped a hair below 780 on Aug. 13. Since then, the summer rally

has boosted the market indicator 30% in just 10 weeks. Such a rapid rise is unprecedented in the history of the market. And along the way, several records were set for trading volume on individual days.

As has been the case with most stocks, the rise in chemical company issues has taken place despite no real gains in corporate growth (p. 12). Some observers believe that the stock market explosion presages better times to come.

How the Top 10 chemical company stocks have fared

	Closing Prices		
	Aug. 13	Oct. 20	% Change
DuPont	305 1/8	400	30.6%
Dow	197 1/8	273 1/4	39.6
Union Carbide	42 1/4	55 3/8	31.1
W. R. Grace	28 3/4	41 3/8	43.9
Monsanto	62	83 1/4	33.9
American Cyanamid	27 5/8	33 1/4	20.4
PPG	33 3/8	46	37.8
Diamond Shamrock	17 1/4	24	39.1
Celanese	42 1/4	53 3/8	26.3
Hercules	17 1/8	26	51.8

Source: CW.