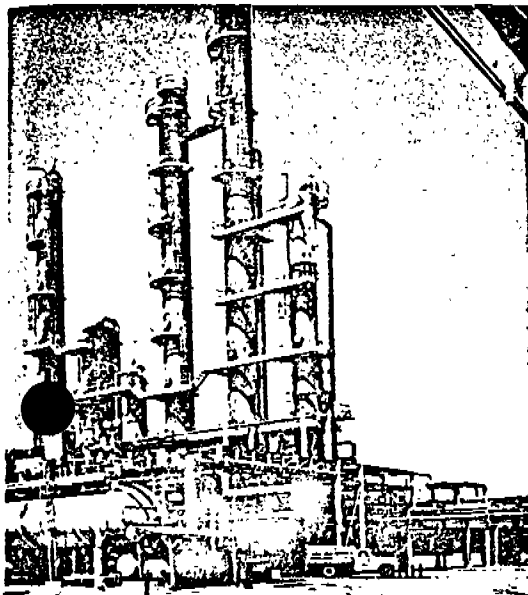


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Strict standards set for vinyl chloride

Final regulations that sharply reduce worker exposure to vinyl chloride have been issued by the Occupational Safety and Health Administration, four days before an emergency standard was due to run out. The new regulations apparently don't really please anybody. Labor has given them a lukewarm reception. And industry, which thinks they are far too strict, has immediately challenged them in the courts. Vinyl chloride has been linked to several liver cancer deaths among production workers.



Masks may be needed at plants like this

The new standard, covering vinyl chloride, polyvinyl chloride, and PVC fabricating facilities, will be implemented in steps. The present level of 50 p.p.m. will continue until Dec. 31. On Jan. 1, 1975, vinyl chloride in work-place air must be reduced to 1 p.p.m. averaged over an eight-hour period. Workers may be exposed to no more than 5 p.p.m. averaged over any period no longer than 15 minutes. If these levels can't be met, employees must be provided with respiratory equipment that can reduce the vinyl chloride concentration to 1 p.p.m.

The reliance on respirators "places the companies at an advantage," according to Louis S. Beliczky, director of hygiene for the United Rubber Workers International Union. He warns that it "may have the effect of minimizing efforts to initiate engineering controls and could lead to a 100% reliance on respirators." However, he says that "in light of all the pressure that has

confronted the assistant secretary, he has acted in a way that demonstrates his good faith."

Industry spokesmen take a much different view of OSHA's action. Todd C. Walker, president of Firestone Plastics, calls the standard "economically unrealistic, technically unfeasible, politically motivated, and medically ridiculous," adding that it "throws 2 million jobs down the drain." And Ralph I. Harding, president of the Society of the Plastics Industry, claims that "not one shred of evidence was presented at the public hearings or since that could have led OSHA to the conclusion that a lower level was necessary or achievable at this time." Firestone has filed a suit and joined another suit filed by SPI asking for prompt and complete review of the standard.

Drug cuts cancer risk after mastectomy

The survival rate for women who have undergone radical mastectomy—surgical removal of the breast and adjacent tissue—can be improved dramatically by the use of certain anticancer drugs. One of these is L-phenylalanine mustard (L-PAM), which shows promise for use in premenopausal women.

This is one of the findings of a study of the disease and its treatment by a task force of the National Cancer Institute. According to the just released report, breast cancer kills more women in the U.S. than any other form of cancer. There will be an estimated 89,000 new cases this year, and 32,500 will die from it.

L-PAM, known chemically as *p*-di(2-chloroethyl)amino-L-phenylalanine, is an alkylating antineoplastic agent. It was first approved for use by the Food and Drug Administration in 1964, according to NCI.

Generally, radical mastectomy is performed on women whose breast cancer has spread to the axillary lymph nodes. Lymph node involvement, in turn, usually heralds the spread of cancer, or metastasis, to other parts of the body. Historically, NCI says, more than 50% of breast cancer patients with metastatic disease eventually die from it.

In NCI's two-year study of the postoperative use of L-PAM in premenopausal women who had undergone modified or radical mastectomy and were shown to have lymph node involvement, only one in 30 patients receiving the drug

developed recurring cancer. In placebo-treated patients, 11 of 37 patients developed cancer following surgery. Results were so encouraging in the premenopausal group that the control group in the study was dropped. In postmenopausal women, recurrence rates also were reduced, but not as dramatically. Studies of the use of L-PAM in postmenopausal patients are still going on.

Texas' big share of chemicals may drop

Future chemical plant investment in Texas will depend on how the state moves to meet competition from other areas as a result of energy availability, says Dr. Edward R. Kane, president of Du Pont. The state's share of total U.S. petrochemical production may drop 10% over the next decade, he adds, as a result of natural gas regulation policies, environmental restrictions, and the disposition of Alaskan crude oil.

There are several sources of competition with Texas for chemical plant investment, Dr. Kane told the first "Salute to Industry Week" dinner of the La Porte-Bayshore Chamber of Commerce held near Houston last week. Besides the neighboring Gulf Coast states, other competitors are Canada and the Middle East.

Specifically, Dr. Kane cites the commitment of Iran to fill 10% of the world growth in petrochemical demand over the next decade. Saudi Arabia, with even more hydrocarbon resources than Iran, also is developing a major stake in petrochemicals, he adds.

The Petrochemical Energy Group, of which Du Pont is one of 19 members, has made a series of recommendations to the Energy Advisor Council of the governor of Texas to aid growth of petrochemical production in the state. Among the specific suggestions is one to encourage more complete extraction of ethane from natural gas where such recovery is economic. The ethane would be used as feedstock for ethylene.

Another suggestion is to encourage greater production of chemical feedstocks in refineries. Benzene, in particular, is cited as a key material. A third suggestion is to set up priority uses for natural gas to direct the diminishing supply to such end uses as making agricultural chemicals, plastics, and other petrochemical products.

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