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international plastics news

ASD

Britain's 'OSHA' has second thoughts about VCM

BY: A. S. D.

An article in a recent issue of the British Medical Journal suggests that vinyl chloride monomer may not be as serious a hazard as was formerly supposed.

In that publication (Oct. 7, 1977), Dr. Peter Baxter and three other doctors who are affiliated with the Health & Safety Executive (a British government agency similar to our OSHA), reviewed the preliminary report by the agency on the incidence of angiosarcoma (liver cancer) in Great Britain.

Specifically the report looked for any correlation between incidence of the disease among workers and in the general public around factories where PVC resin is manufactured or processed.

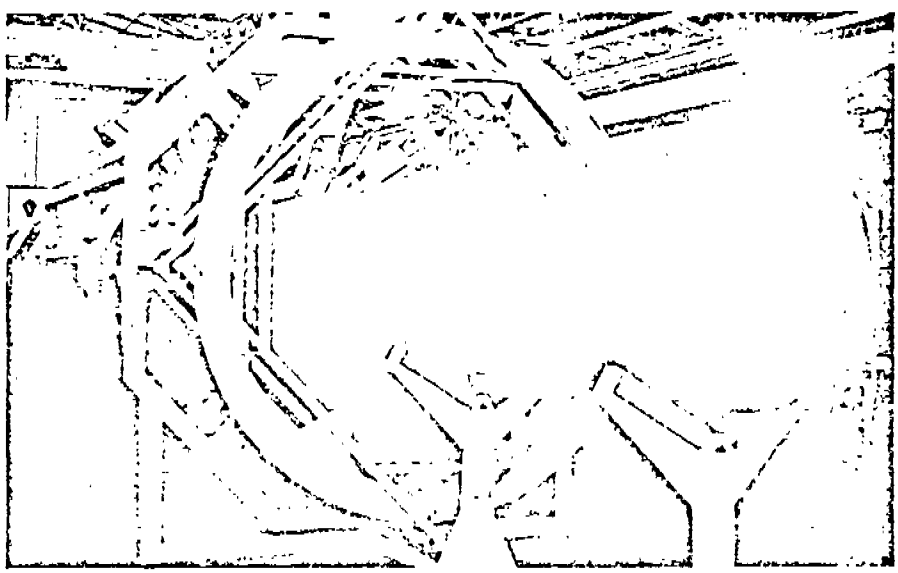
Reviewing health records for the 10-yr period of 1963-73, the study states that of the 47 cases of liver cancer reported, in only 14 instances was the diagnosis confirmed. Further, of those 14 cases, only one could be "confidently associated" with exposure to VCM. In that instance, the worker had probably been exposed to VCM concentrations exceeding 200 ppm in air for more than 20 years. The VCM exposure standard in Britain is 10 ppm averaged for an 8-hr day.

Turning to the statistics for the general population, living near PVC-using plants, the study found one confirmed case of angiosarcoma, a man who lived within half a mile of such a plant for 6 years before his death. However, no correlation could be found between the incidence of the disease in the general population and the location of PVC operations.

The report also failed to find any cases of the disease that could be attributed to ingesting VCM from foods contained in PVC packaging materials.

Based on that 10 year period, the article's authors concluded that the incidence of this type of cancer in Great Britain appears to be considerably less than 10 cases annually in a population of 50 million and that only one case of the disease diagnosed during that entire 10-yr period could be definitely associated with VCM exposure. The authors, however, did not dismiss the possibility that angiosarcoma could be caused by low-level exposure to VCM and endorsed a continuing monitoring of the situation.

Commenting on the study, a spokesman for the Employment Medical Advisory Service, the parent organization of the Health & Safe Executive, stated: "The findings gi us grounds for hope that the chemic will turn out to be less of a cancer ris than when the American finding were announced."



This 1400 mm (47 in.) polyethylene pipe was recently extruded on a 160 mm (6 1/2 in.) extruder in a trial run at the builder's plant before shipment to a pipe producer in Europe. Designed and built by Luigi Bandera S.p.A., Busto Arsizio, Italy, the extruder has a rated output of about 1550 lb/hr and can produce pipe of up to 55 in. dia.

U.K: plastics production posted gains in '77

Though final figures for the year a not yet available, plastics productic figures for the first 6 months of 197 indicated that the year may end u about 6% higher than 1976.

Based on the first half of the yea 1977 plastics production totalle 1.356 million metric tons (about 3.: billion lb). This represents an annu rate of about 2.7 million ton compared to 2.56 million tons in 197 Considering the lethargic state of th

		(100 metr tons
Alkyds		72.4
Polyesters		34.1
Aminos		92.0
Phenolics		29.8
Epoxides		11.2
Polyurethanes		38.4
Other thermosets		166.9
Total	444.8	
Acrylics		33.3
Polyethylene		264.5
Polyethylene		133.3
PVC		208.1
Other vinyls		5.7
Polystyrene (crystal)		34.2
Polystyrene (impact)		53.9
Polystyrene (expanded)		29.4
Other styrenes		5.3
ABS		16.6
Polyamides		16.4
Other thermoplastics		14.7
Total	851.6	
Total		1296.4

British economy, this performance viewed as reasonably satisfactory.

Looking at specific resins, the was no major growth area. Bo polypropylene and polyethylene r ahead of '76, though PVC productic remained level.

With the exception of polyprop ene, there was no major shift in t level of exports or imports. P however, was up about 34% on annualized basis over the 71.0 metric tons shipped in 1976. Impor of PP were up almost as much, abo 26%. The accompanying table sno the U.K. production by resin for t first half of 1977

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