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PVC/ECOLOGY

Mid 1968 to end of 1969 marked a period of great interest in removing lead from gasoline. The means by which the petroelum companies accomplish lead removal and the amount of lead free gasoline produced affects PVC indirectly. A change in availability and economics of currently available petroleum by products can change the emphasis on the use of various plastics systems, which use petroleum products as raw materials.

January, 1970 — National Bureau of Standards Building Research Division issued a report on a study showing that PVC releases HCl when burned. The HCl acts as a primary irritant and corrosive agent to the respiratory system.

February, 1970 — A Federal grant was issued to Syracuse University Research Corporation to study municipal incineration of plastic wastes.

February, 1970 — President Nixon, in a special message to Congress, outlined a program to "rescue our natural habitat." Included in the program was a call for research looking toward recycling plastics and the production of packaging materials that are easily degradable.

April, 1970 — Kenneth G. Michel, Continental Can Co. in a talk presented at the American Management Association Packaging Show, claimed that PVC packaging materials won't become a problem in municipal incineration. His reasoning was that before PVC reaches possible hazard levels, scrubbers would be madatory on incinerator stacks.

April, 1970 — The SPI announced its sponsorship of a New York University research project designed to pinpoint the effect of burning plastics on incinerator systems.

July, 1970 — A Swedish report presented at the Oslo Conference pointed out that "HCl corrosion may occur in refuse incineration plants (when vinyls are incinerated), but that preceptible corrosion does not occur below 300°C."

August, 1970 — T-A Materials, Inc. (New Jersey) announced a process for converting frit (garbage residue after incineration) into bricks and blocks for construction use. A pilot project is now operating in the East.

October, 1970 — Katayose Kogyo of Japan accnounced the availability of incinerators which can burn PVC without significant air pollution or corrosion. Although this incinerator is becoming increasingly popular in Japan, it is not yet available in the U.S.

DSW 588251

October, 1970 SPI issued a position paper on the problem of solid waste disposal. The paper dismissed the PVC problem by stating that HCl as a byproduct of PVC incineration is a negligible air pollutant and that the amount of phosgene generated by burning PVC is so minute as to be virtually nonexistent.

October, 1970 E. E. Winne, Hooker Chemical, claimed that recycling of plastics is at least a decade away. In the meantime, he said, cities must follow the lead of Chicago by building modern and efficient power-generating facilities that can handle the growing amounts of plastic waste materials.

November, 1970 J. James Asbeck, B. F. Goodrich Chemical Co., in a speech to the Grocery Manufacturers Association, claimed that because of its high heat-generating value, plastics solid waste can make a positive contribution to our national energy crisis as well as reducing our pollution problems.

November, 1970 California and Illinois are considering legislation which would prohibit burning PVC containers.

December, 1970 German, Belgian and Swedish investigators presented various test results relating to PVC incineration, all pointing to the negligible effects of such incineration.

January, 1971 The Japanese PVC Association established an Environmental Measures Committee to vigorously promote countermeasures for environmental pollution and treatment of PVC waste.

February, 1971 Dow Chemical announced a new process to control the release of HCl during incineration of PVC by the application of alkalies to the wastes before burning.

March, 1971 At the London conference on "Plastic waste and the environment" A. E. Higginson called PVC "the most dangerous of all plastics because it gives off corrosive gases and acids when incinerated."

May, 1971 Rep. Joseph P. Vigioto (D-Pa.) offered "statistical proof" that people would rather buy beer and soft drinks in returnable bottles. Thus, he will attempt to get Congress to pass a law against throw-away containers.

May, 1971 In the April issue of Environment Magazine, three scientists analyzed the precise origins of pollution. They showed that population growth and increases in the gross national product were NOT major factors in increased levels of pollution. The major factor appears to be certain types of production, especially plastics. They concluded, "Thus, in seeking public policies to alleviate environmental degradation, it must be recognized that a stable population with stable consumption patterns would still face increasing environmental problems if the environmental impact of production continues to increase. Hence, social choices with regard to productive technology are inescapable in resolving the environmental crisis."

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