

Plastics News Briefs

Volume 4 Number 12

June 25, 1984

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Additional information about any item in this issue of the newsletter may be obtained by contacting Aileen Gorschman, Editor, Public Relations Department, The Society of the Plastics Industry, Inc., 355 Lexington Avenue, New York, NY 10017 (212) 573-9400.

SPI PETITIONS EPA TO EXCLUDE STRUCTURAL POLYMERS FROM TSCA INVENTORY REPORTING RULES...

Petition includes inorganic glasses among structural polymers; also requests that inorganic glasses be deleted from a "note" that improperly classifies them as "mixtures" in the Toxic Substances Control Act (TSCA)... "It is SPI's position that all chemical substances that are used for their structural properties should be excluded from the Inventory Rules," stated SPI president L. William Sessions... "Under the current regulations, the only structural materials not already excluded are organic structural polymers"... Petition seeks to correct this and establish a justifiable exclusion for all structural polymers on basis that they are not used in commerce as chemical substances, per se... For additional information or copy of petition contact Fran Lichtenberg, assistant technical director, SPI/New York.

NEW SPI DUES SCHEDULE FOR PLASTICS OPERATOR WITH UNDER \$5-MILLION ANNUAL SALES

... Recent dues schedule action by SPI Board of Directors "provides a greater opportunity for more small-to-medium-sized plastics firms to participate in our Society's activities," according to SPI president L. William Sessions... In addition, SPI is offering special introductory membership at 50 percent off regular dues for all companies that join Society before May 31, 1985... Information on dues schedule and membership available from Beverly Gray, membership manager, SPI/New York, and from SPI section offices in Totowa, NJ; Framingham, MA; Des Plaines, IL, and Norwalk, CA.

VINYL CHLORIDE ROUND ROBIN TESTING CONDUCTED... Vinyl Chloride Analysis Task Force of SPI's Food, Drug and Cosmetic Packaging Materials Committee conducting testing... Objective: to develop test method and present results to U.S. Food and Drug Administration prior to proposal of regulations for polyvinyl chloride (PVC) packaging materials (expected to occur in October 1984)... Test method sensitive to 1 part per billion (ppb) for measuring vinyl chloride in food simulating solvents... Anyone interested in participating in round-robin must set up analytical procedure, calibrate two food surrogates for analysis (corn oil and 50/50 ethanol/water) and analyze round robin samples... Analytical results should be submitted in sufficient time to allow statistical evaluation prior to July 16, 1984 meeting of Task Force... Information and submissions: Task Force chairman Arthur Roaldi, Occidental Chemical Corp., Grand Island Research Center, Long Road, Grand Island, NY 14072, telephone: (716) 773-8646.

ROGER G. BERNSTEIN JOINS SPI AS DIRECTOR OF STATE GOVERNMENT AFFAIRS... Appointment effective June 18, 1984... Bernstein will be based in SPI Washington office, reports to Lewis R. Freeman, Jr., SPI director of government affairs... Bernstein previously with Glass Packaging Institute, where he conducted liaison work with external public interest groups, served as director of communications, and as legislative director... Work with GPI involved state relations, activity in 35 states, and focused on direct state lobbying and coalition building... Prior to joining GPI, he served as political consultant, newspaper editor, and instructor at University of Maryland... Holds undergraduate degree from Washington and Jefferson College (Washington, PA) and M.A. in English from Northwestern University... Bernstein and wife Fran have two children.

CALL ISSUED FOR POLYURETHANE HALL OF FAME NOMINATIONS... Both SPI members and nonmembers eligible... Nominee need not be a member of polyurethane industry, can be from academia, government, research or communications... Nominations can be made on basis of leadership, technical achievement, marketing innovation, research and development, contributions in education or production or machinery processes... Hall of Fame established in 1983... First honoree was Dr. Prof. Otto Bayer, generally recognized as "father" of polyurethane chemistry... Nominations must be submitted by September 15, 1984... Applications available from H. Patrick Toner, manager, Polyurethane Division, SPI/New York.

SPI FILES COMMENTS WITH EPA ON EFFLUENT GUIDELINES FOR MOLDING/FORMING... Comments submitted to Environmental Protection Agency (EPA) on Effluent Limitation Guidelines for the Plastics Molding & Forming Industry Category (SIC 3079)... Proposed guidelines published in Federal Register (49 FR 5862-5883)... Guidelines cover direct discharges of "process water" (any water that contacts plastics product or shaping equipment surfaces, such as molds, that have been in contact with plastics product)... SPI believes data does not support need for effluent guidelines and direct discharges should continue to be regulated on a case-by-case basis under existing National Pollution Discharge Elimination System procedures... Copies of SPI's comments available from SPI Washington, DC office.

SPI/SPE PLASTICS SHOW & CONFERENCE - SOUTH: ATLANTA, OCTOBER 8-10, 1986... Will be held in Georgia World Congress Center... Thomas J. McGrath, SPI vice president, divisions and trade shows, reports June 1984 mailing resulted in responses from 175 companies requesting almost 52,000 square feet of exhibit space... McGrath observes that such willingness by leading companies to make commitment two-and-a-half years before event acknowledges optimism for industry's future, and recognition of immeasurable value show offers to plastics and plastics-consuming industries.

EPA ADOPTS NEGOTIATED TESTING PROGRAM FOR DOTP... Environmental Protection Agency (EPA) announced its decision not to propose a Toxic Substances Control Act (TSCA) section 4 (a) rule to require environmental or health effects testing of bis (2-ethylhexyl) terephthalate, also known as dioctylterephthalate or DOTP... Used as plasticizer in plastics industry... EPA accepted comprehensive testing program proposed by Eastman Kodak Co.... Agency proposes to adopt negotiated testing programs for several other chemicals of interest to plastics industry; six fluoroalkenes (all used as precursors in manufacture of polymers and elastomers) and tris (2-ethylhexyl) terephthalate, also known as trioctyltrimellitate or TOTM (a primary plasticizer for vinyls).

SPI STAFF DIRECTOR JULIE CAHN PRAISED FOR ROLE IN VINYL SIDING SUCCESS... Writing in May 1984 issue of trade monthly R.S.I. - Roofing/Siding/Insulation, John Ingersoll, a journalist who has covered the remodeling industry for over 33 years, notes that altered language in standards meant that as of January 1, 1984 vinyl and aluminum sidings were no longer banned for rehabilitation of certified historic buildings in the U.S.... Ingersoll writes that the battle was carried to the Interior Department by industry representatives "but by none more fiercely than Juliette Lang Cahn... If blue ribbons were handed out, she would deserve a fistful."

EPA ISSUES PROPOSED RULEMAKING ON FORMALDEHYDE... Environmental Protection Agency announced two simultaneous actions on formaldehyde (49 FR 21870-21898), covering two exposure categories: use of formaldehyde in apparel manufacture and certain formaldehyde resins used in mobile and conventional home construction materials... First action is designation of formaldehyde for priority consideration under Section 4(f) of Toxic Substances Control Act (TSCA)... Agency may give priority attention to a chemical if it has reason to believe that chemical may pose "unreasonable" risks to society... Section 4(f) designation usually followed by an Advanced Notice of Proposed Rulemaking (ANPR) if regulation of chemical is warranted... In this case, EPA has determined it had enough information to propose the ANPR simultaneously with 4(f) designation... Announced ANPR will begin an investigation of regulatory options on formaldehyde... Comments on proposed rulemaking to EPA by July 23, 1984.



SPI-26844

Plastics News Briefs

Volume 4 Number 20

October 15, 1984

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Additional information about any item in this issue of the newsletter may be obtained by contacting Aileen Gorschman, Editor, Public Relations Department, The Society of the Plastics Industry, Inc., 355 Lexington Avenue, New York, NY 10017 (212) 503-0600.

SPI CALLS FOR MORE DETAIL FROM SIC SYSTEM... SPI proposal filed with Office of Management and Budget requests that designation of plastics products be expanded from one to eight categories in next revision of Standard Industrial Classification (SIC) Code, system of nomenclature by which U.S. government measures domestic industrial activity, scheduled for 1987... Current SIC Code category for Miscellaneous Plastics Products, 3079, not revised since 1947... SPI submission points out that just since 1958, value of shipments of plastics falling into this category has increased by 1,500 percent... Proposal calls for establishment of following new categories for data collection on plastic products: 3071--film and sheet, unsupported; 3072--piping; 3073--bottles; 3074--foam products; 3075--molded products; 3076--extrusion (except film, sheet, piping); 3077--reinforced plastics; and 3079--miscellaneous... Copy of complete SPI proposal available from SPI Washington Office, 605 14th St., NW, 7th Floor, Washington, DC 20005 (202) 628-0270... Additional information also available from Howard Kibbel, SPI/New York.

EPA DENIES SPI STRUCTURAL POLYMER PETITION... Environmental Protection Agency has denied SPI request that polymers used to make plastics be considered "structural polymers," thus distinguished from chemicals in inventory-reporting rules under Toxic Substances Control Act (TSCA)... SPI citizen's petition, filed in June, rejected (49 FR 38844) on following grounds: 1) EPA finds no factual evidence in petition supporting SPI's contention that structural polymers are not chemical substances per se for inventory purposes; 2) Inorganic glasses (which are excluded) and thermoplastic polymers exhibit significantly different properties in way they are formed and in their respective structures and physical and chemical properties; and 3) Inventory exclusion is inappropriate... SPI subsequently has written EPA indicating it will await agency's final rule under Section 5(h)(4) exemptions before considering further action.

RCRA GIVEN FINAL APPROVAL BY BOTH HOUSES... Conference report on H.R. 2867, bill providing for four-year reauthorization of Resource Conservation and Recovery Act of 1976 strengthening controls on handling and disposal of hazardous waste, overwhelmingly approved in both houses in legislative session's last days... Only major environmental legislation to pass 98th Congress... Bill now awaits President Reagan's signature to become law... Requires Environmental Protection Agency to adopt standards for generators of between 100 and 1,000 kilograms of hazardous waste per month by March 31, 1986... Standards may vary from those for large quantity generators, but would have to "protect human health and the environment"... Also requires that hazardous waste generated in quantities between 100 and 1,000 kilograms per month be accompanied by a uniform manifest and disposed of at RCRA-approved facility... Because of impact H.R. 2867 will have on small business, Congress authorized funds for EPA to conduct educational program to alert small generators that they will be regulated... SPI currently reviewing legislation to ascertain possible impact on plastics industry.

PARTICIPATION IN SPI GROUP LIFE INSURANCE PLAN PROVES BENEFICIAL... 22 percent dividend check recently sent to all participants in SPI-sponsored Group Life and Accidental Death and Dismemberment Insurance Plan... Due to extremely favorable claim loss experience for policy year that ended January 31, 1984... Approximately 85 member firms currently enrolled... Details and individualized company proposals may be obtained from Herbert L. Jamison & Co., Plan Managers, SPI-Insurance Trust, 90 Park Ave., New York, NY 10016 (212) 686-2233... All inquiries will be handled promptly by Robert J. Conway or Mark R. Jamison.

SPI-26845

OMNIBUS TRADE BILL FINALLY CLEARS CONGRESS... House and Senate passed October 9 omnibus trade bill, H.R. 3398, that caps effort dating from previous Congress to amend nation's trade laws... While full effect and usefulness of measure must await further scrutiny and experience, little question that its provisions will have far-reaching impact upon American industry... Major features of bill include: reciprocity--President's authority expanded to respond to foreign un-fair trade practices; U.S.-Israel trade--President granted authority to negotiate tariff agreements with Israel; renewal of Generalized System of Preferences (GSP) program, providing for duty-free treatment for selected imports from some 140 developing countries; trade remedies; and miscellaneous tariff amendments... More detailed description of bill available from SPI Washington Office, 605 14th St., NW, 7th Floor, Washington, DC 20005 (202) 628-0270.

ITC TO INVESTIGATE U.S.-CANADA TARIFF REDUCTIONS... International Trade Commission announced October 12 investigation of probable economic effect of providing duty-free treatment for selected imports from Canada... Action follows request from U.S. Trade Representative Brock, on behalf of President, as part of bilateral trade talks between U.S. and Canada concerning mutual reduction or elimination of tariffs on sectoral basis... Recently passed omnibus trade bill, H.R. 3398 (see above), provides general authority for these negotiations... Investigation will focus on selected U.S. Tariff Code items in petrochemical category, among others... More than 50 petrochemical items slated for study include: styrene; polystyrene; vinyl chloride; acrylonitrile; and polyester (unsaturated), polyvinyl chloride, polypropylene, polyethylene, and ABS resins... Public hearing on investigation set for January 15, 1985 in Washington, DC at ITC, 701 E St., NW, beginning at 10 a.m.... Requests to testify should be filed with ITC Secretary by January 8... Copy of Federal Register notice (49 FR 40199) on investigation and tariff item numbers to be examined available from SPI Washington Office, 605 14th St., NW, 7th Floor, Washington, DC 20005 (202) 628-0270.

SPI FOOD, DRUG AND COSMETIC PACKAGING MATERIALS COMMITTEE SEMI-ANNUAL MEETING... Wednesday-Thursday, December 5-6, 1984, Hyatt Sarasota, Sarasota, FL... Program highlights include reports from chairmen of following task forces (part of Committee's Technical Information Subcommittee): VCM Analysis--Art Roaldi, Occidental Chemical Corp.; Colorants--Ned Bletsco, Good-year Tire & Rubber Co.; and A.D. Little Report Task Force--Paul Ketterer, Tenneco Polymers, Inc.... Details: Fran Lichtenberg, SPI/New York.

'GOVERNMENT AFFAIRS, SMALL BUSINESS AND THE EPOXY RESIN FORMULATOR' THEME OF SPI MEETING... Epoxy Resin Formulators Division Fall Meeting, November 12-15, 1984 (Monday-Thursday), Marriott Crystal Gateway Hotel, Arlington, VA... Program will include series of seminar/workshops on regulatory affairs, industry issues, technical subjects, environmental affairs, and small businesses... Featured dinner/breakfast speakers: Alan Baron, political analyst and editor/publisher of Baron Report, "What the Voices Have Told Us"; Bruce Davie, chief tax economist of House Ways & Means Committee, "Outlook for Tax Legislation in the 99th Congress"; Rep. Claudine Schneider (R-RI), member of House Science and Technology Committee, "Issues Facing the Upcoming Congress"; and Mark Jones, small business ombudsman of Environmental Protection Agency, "Small Business Interest in Environmental Regulation"... Details: Ron Frano, SPI/New York.

WOLFGANG A. MACK RECEIVES 1984 SPI EASTERN SECTION ACHIEVEMENT AWARD... President and a director of Werner & Pfleiderer Corp., Ramsey, NJ, Dr. Mack honored for significant achievements in plastics industry as well as numerous contributions to various industry-affiliated professional societies and organizations... Member of SPI national Board and recently elected director-at-large of Eastern Section Board of Directors for two-year term... Award presented by last year's winner, John Reib, president of Conair Corp., at Section's 10th Annual Conference recently held in Boca Raton, FL, which had record-breaking attendance.

CONGRESS PASSES FIRE-SAFE CIGARETTE STUDY... House and Senate both have given final approval to legislation authorizing study of feasibility of developing fire-safe cigarettes which would be less likely to ignite if dropped on upholstered furniture... SPI has supported this legislation, hailing it as important step in improving fire safety... Measure, H.R. 1880 (H. Rpt. 98-917), would create interagency task force to be chaired by U.S. Consumer Product Safety Commission along with U.S. Fire Administration and Department of Health and Human Services... President Reagan expected to sign bill.

Vinyl Chloride Gas Limitation Upheld by Court

Justices Refuse to Review
U.S. Curb on Exposure,
Challenged by Industry

By a WALL STREET JOURNAL Staff Reporter
WASHINGTON—The Supreme Court refused to hear challenges to a federal standard requiring dairy restaurants to restrict exposure to vinyl chloride gas.

It left standing a lower court decision holding the standard, which took effect April 1, Review had been requested by California Corp., Firestone Tire & Rubber Co., and the National Association of Dairy Restaurants.

In other actions, the Supreme Court agreed to decide whether the 1964 Civil Rights Act requires coverage of pregnancy tests, an employer's duty to pay and disability benefits, and whether a law requiring that liberty interest be protected by the government is violated.

Set Vinyl Chloride Limits, Due Jan. 1, May Be Delayed by Federal Court Ruling

By a WALL STREET JOURNAL Staff Reporter

NEW YORK — Imposition of Labor Department standards to severely limit exposure of workers to vinyl chloride, a gas linked with more than two dozen cases of a rare liver cancer, might be delayed by a federal appeals panel's decision.

Permanent standards developed by the Labor Department's Occupational Safety and Health Administration, which would require companies to hold vinyl chloride levels in the air workers breathe to one part vinyl chloride per million parts of air, averaged over an eight-hour period, are scheduled to go into effect Jan. 1. But a special three-judge panel of the Second Circuit Court of Appeals here granted a stay until it could decide the merits of an appeal by the Society of the Plastics Industry and eight companies that oppose the new standards.

The judges, retired U.S. Supreme Court Justice Tom O. Clark and Judges Frederick van Pelt Bryan and Kevin T. Duffy of the U.S. District Court of the Southern District of New York, have heard all the arguments presented by the companies and by the Justice Department, representing the Labor Department, and could conceivably rule on the merits of the appeal by Jan. 1. In the event they don't, however, standards in effect since last April that permit 50 parts per million of vinyl chloride would remain in force, the panel ruled.

The 50-parts-per-million limit was issued by the labor agency unit as a temporary emergency standard last March, within weeks of the first reports that workers exposed for several years to high concentrations of vinyl chloride gas had died of liver cancer, a rare but invariably fatal disease. The emergency standard was issued last April.

Under the 50-parts-per-million limit, levels of vinyl chloride in factory air were usually considerably higher, often running several thousand parts per million, under the temporary standard.

came had been applied wide-wide. But industry challenged the second stage, a one-part-per-million limit, due to begin Jan. 1, as unnecessarily strict and impossible to meet.

In addition to the Society of the Plastics Industry, the concerns participating in the appeal of the permanent standards are the Hooker Chemical Corp., a subsidiary of Occidental Petroleum Corp.; Union Carbide Corp.; Air Products & Chemicals Inc.; B. F. Goodrich Co.; Unihroy Inc.; Dow Chemical Co.; Firestone Tire & Rubber Co. and Tenneco Inc.

Vinyl chloride is a widely used industrial gas used mainly to make polyvinyl chloride, or PVC, a plastic with many applications. Use of the gas as a propellant in aerosol products has been banned.

About 4,000 workers are employed in plants that make vinyl chloride gas and/or polyvinyl chloride, but the permanent standards would also affect workers who fabricate PVC into a wide variety of finished products. The number of workers in the PVC fabrication industry has been variously estimated at 350,000 to 700,000.

WALL STREET JOURNAL

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AM EDITION

WEDNESDAY, DECEMBER 17, 1975

What's News—

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World-Wide

FORD IS CONCERNED about Soviet in-
tervention in Angola.

The White House said the President is "seriously concerned" about Russia and Cuba "supplying large quantities of men and equipment" to the African nation. The Senate was maneuvering to end reported U.S. aid of up to \$50 million to two anti-Communist forces in the civil war. Ford sent CIA and State Department officials to brief a Senate Foreign Relations subcommittee behind closed doors. The full Senate, which was to meet in secret session today, has deferred action on a \$112.3 billion defense appropriations bill.

The administration, which said it feared damage to U.S.-Soviet detente, was believed to be hoping for a military stalemate that would lead to a coalition government in Angola.

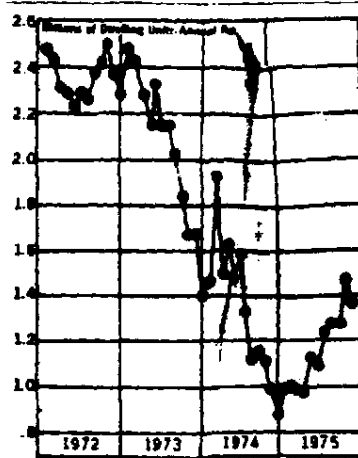
The Foreign Relations subcommittee later voted to stop military aid and to urge all foreign nations to withdraw. The panel agreed that diplomatic efforts should be started. Chairman Hubert Humphrey (D., Minn.) said the seven-member subcommittee unanimously adopted two measures that would bar aid but that would give Ford the option of seeking authorization.

In South-West Africa, a South African territory bordering on Angola, a major conflict appeared to be developing between white government troops and black guerrillas seeking independence. Johannesburg announced that 81 insurgents and three South Africans died in a recent clash, the highest guerrilla toll ever reported in the mineral-rich land.

The construction-picketing bill mightn't be sent immediately to Ford because of the possibility of a pocket veto while Congress is in recess, Senate Majority Leader Mike Mansfield (D., Mont.) indicated. The head of the AFL-CIO Building Trades Department said he had "no doubt whatsoever" that Ford would resist pressure and sign the bill, which broadens union rights to picket an entire site.

Commercial banks participating, even directly, in the Arab boycott against Israel may be violating federal or state laws, Federal Reserve Board said. One spokesman mentioned by Fed Chairman Paul Volcker is issuing letters of credit that require an exporter to certify it isn't tied in with

Housing Starts



HOUSING STARTS in November fell to a seasonally adjusted annual rate of 1,275,000 units from a revised 1,487,000 units in October, the Commerce Department reports. (See story on page 2.)

Philadelphia Plans A Moving Occasion This New Year's Eve

Citizens Should Have a Ball,
Though the Bell of the Ball
Has Already Been Chosen

By GAIL BRONSON

Staff Reporter for THE WALL STREET JOURNAL
PHILADELPHIA—This city plans a triple-barreled celebration this New Year's Eve. It will:

1. Ring out the old year.
2. Ring in the new.
3. More to come.

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SPI-26849



OSHA ZEROS IN ON VCM



PVC FITTINGS AT THE LOCAL HARDWARE STORE. What future is "down the pipe" for the PVC industry? Some are worried following the recent OSHA standards.

Since the OSHA standard on vinyl chloride was released a month ago, processors and suppliers alike have been busy monitoring their operations. Lee Pitchforth, OSHA hygienist who monitored some 50 plants in California in May, 1974, has commented that he was impressed with the diligence of some of the processors in their monitoring. He suggests that plant managers compare their data to determine how difficult conformance will be in various parts of the plant.

Most smaller processors are using outside laboratories as monitoring services. Results in general are running below "permissible exposure limit" (one part per million eight-hour average, with 5 ppm ceiling). Many processors are even below the 0.5 "action level."

Employers should initiate a program for determining the exposure of every employee. If any employees are exposed over the 0.5 "action level," the employer must determine from repeated monitoring data whether the employee is exposed above the permissible exposure limit.

A brief memorandum describing how these and other aspects of the OSHA standard affects vinyl chloride fabricators was recently sent to SPI members last month and more are available. Copies of the standard are available from the SPI office.

Immediately following the issuance of the OSHA standard, SPI filed a petition for review of the standard in the U. S. Circuit Court of Appeals

FTC Rules on Cellular Plastic

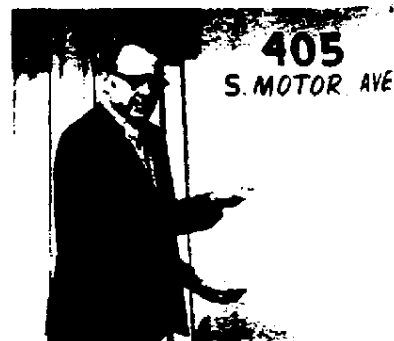
The Federal Trade Commission, in closed door deliberation, is nearing final action on a consent order which was provisionally announced July 29.

The order, which covers cellular plastics used in construction and in furniture, would require manufacturers to (1) stop using terms which could mislead users regarding performance under actual fire conditions, (2) notify users and the fire, insurance, and building code communities of fire hazards associated with cellular plastics, (3) establish a five-million-dollar research program, and (4) establish a committee to administer the research program.

The consent order applied primarily to major suppliers. At the same time the FTC also proposed a trade regulation rule covering the entire industry.

Comments on the proposed trade regulation rule must be filed no later than December 10, 1974, and oral hearings are scheduled to commence on January 13, 1975. At the present time SPI is formulating comments on behalf of the industry, and every step is being taken to limit the scope of the regulations to avoid unduly severe marketing dislocations.

Some effect has already been felt. One municipal inspector in California has reacted by prohibiting the use of a polyurethane foam-molded product, according to the manufacturer of the product.



CHET McCLOSKEY (NORAC) inspects printer's proof copy of upcoming organic peroxides wall safety bulletin. (See page two)

UPCOMING CHAPTER EVENTS

Southern and Northern California



BRYAN

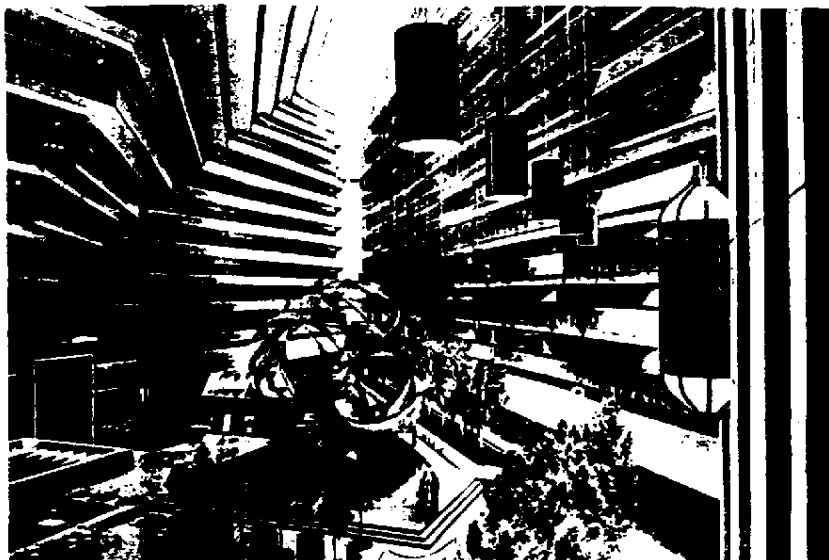
Speaking to both chapters on the same day will be Don Bryan (Mobay Chemical) of SPI's national Public Affairs Committee. The day is November 21 — in the evening to the Northern California Chapter, and earlier the same day in Southern California. Bryan will explain how SPI's public affairs program is addressing the vitally important topics of combustibility and vinyl chloride. (See *In the Mold* for details.)

Pacific Northwest

Do you like an evening when you get involved in an animated discussion and come away with a head of ideas; if so, join management consultant and motivational training instructor John Shaw in his three-hour afternoon seminar on "Effective Management Communications." According to Shaw, this psycho-cybernetics-oriented roundtable offers a chance to adopt new communications skills and learn how to exchange ideas more effectively with middle and top-management plastics people.



SHAW at San Francisco



VISUAL PREVIEW OF COMING WESTERN SECTION CONFERENCE, April 23-25, 1975. Moving this year from our familiar San Diego surroundings, conference goers will enjoy this spectacular view of one of the most unusual buildings, the San Francisco Regency Hyatt Hotel, in a city of already distinctive skyline.

The Northern California Chapter heard Shaw in October and was highly stimulated. In the evening over dinner, Shaw deals with the fascinating topic, "New Memory Techniques." After the meeting in Northern California, Paul Rossi was heard to comment, "That was a tremendous meeting; I just can't remember what he said!" (See *In the Mold* for Pacific Northwest details.)

PFT Conference Committee Calls for Papers

Preparing for their coming joint SPI SPE spring conference in San Diego, the conference committee is seeking offers and suggestions for papers. Focusing on the *Design of Plastic Tooling* for the technical meetings, there are also plans for concurrent live demonstrations of toolmaking techniques hosted by member companies and students from the university. Paper suggestions should be directly to Dr. Gerald D. Bailey, Industrial Arts Dept., San Diego State University, San Diego, California 92115.

WESTERN SECTION OFFICERS

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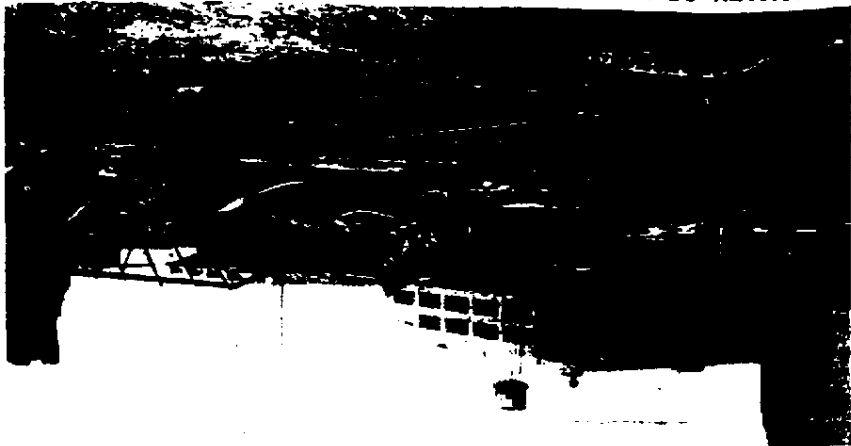
The Society of the Plastics Industry, Inc. Western Section, 611 So. Catalina St., Los Angeles, Calif. 90005 (213) 381-7787

The Western Section covers Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington and Wyoming.

The Chairman Reports

ROBERT ELLIOTT, Western Section Chairman

AFTERMATH OF L.A.'S EXPLOSION AND FIRE, attributed in the media to polyester resin catalyst. Later findings indicate that the explosion was the result, not the cause, of the fire observed by several to have broken out prior to the blast.



In Chicago the national Expandable Polystyrene Group is currently at work on an extensive fire testing program with Factory Mutual and Underwriters Laboratory that should yield definitive facts on the performance of EPS materials in fire situations.

Some good examples have come out of the recent few months. To name but two, the national Urethane Safety Group has issued its Fire Safety Guidelines Bulletin. Already it has created in a number of West Coast companies the desire for uniform national manufacturing and application standards.

Increasing pressure that threatens entire segments of the industry, by bringing in one-sided restrictive legislation. A current of bias against plastics runs deep in the thinking of governmental bodies, local building code groups and the fire fighting community. This is why SPI and every member company must be actively researching and disseminating accurate information that will persuade the public to come to intelligent, rather than emotional, opinions about plastic products in our society.

From the point of view of public attitude, there is no more serious problem to the plastics industry today than combustibility. From a number of directions we are experiencing



United Nations in an attempt to They are also working with the contribution to the industry.

The group hopes to make a significant contribution to the industry. problems of organic peroxides, the can effectively avoid the safety present the facts on how user companies various members of the group will the planning stage, at which time industry-oriented meeting, which is in Fire Safety Bulletin. Together with an

The second is an Organic Peroxides stored catalyst which court disaster resin buildup and contamination of the "poor housekeeping," can bring about practicing, in McCloskey's own words, uninstructed employees in companies they are properly informed. But why users can't do the same, provided without incident. There is no reason quantities of these chemicals for years, companies have been handling immense emphases, peroxide-producing McCloskey (Norac, Azusa, Cal.) handled knowledgeably. As Chet substances, but are entirely safe if peroxides are chemically active inform employees that organic companies to simply and succinctly bulletin for display by peroxide user

The first is a wall-size warning produce two needed pieces of information. Producers Group has been at work to background, the Organic Peroxide MEK peroxide. Against this western involving the polyester resin catalyst, explosion and fire in Los Angeles action following August's tragic

Locally we have just seen concrete

IN THE MOLD

The outcome of this conference will possibly result in legal action against IAPMO to prevent further discrimination against the use of plastic pipe.

assemblies, does not spread fire. pipe, when installed in fire-rated University to demonstrate that plastic sponsored testing at Ohio State SPI's Plastics Pipe Institute recently hazards" of plastic pipe, even though Calif. Their main objection was the "fire John Gerard, Fire Chief of San Jose, County of San Francisco, Calif., and Building Inspection for the City and Alfred Goldberg, Superintendent of

The main opposition came from with respect to the use of plastic pipe. restrictive "model code" in the nation Uniform Plumbing Code is the most vent systems. Today, however, the use of plastic pipe in drain waste and one of the first code groups to allow the use of plastic pipe has been expanded the use of plastic pipe has been of past conferences where efforts to approval by IAPMO's own code change was taken despite recommendations for SPI's Plastics Pipe Institute, the action Code to permit plastic pipe in highrise amendments to the Uniform Plumbing Hawaii, refused to approve proposed (IAPMO), at their annual conference in Plumbing and Mechanical Officials of The International Association of

Plastic Pipe Denied Code Approval

coordinate research efforts in this country, Holland, Germany and Great Britain. The object is to scientifically determine the precise hazards organic peroxides present in handling and shipping. With this information, the industry worldwide will be able to act intelligently and avoid unnecessary restrictions being brought against these important chemical products.

SPI-26853

November 13
November 21
November 21
December 5
December 7
December 20
April 23-25, '77

SO. CALIFORNIA CHAPTER CHATTER



BRADBURY A little friendly competition

World Series Fever

Few events stir the blood of a sports fan like the World Series, but when it divides chapters, sparks have to fly. Such is the background of the challenge from Tony Bradbury, Southern California President, to Northern California President Paul Rossi. The losing board members now have to attend the next major event of the Northern California Chapter. That's the kind of spirit we like to see, even if it was the Dodgers' fault!

Contributors to the Fall Frolic

Comments following this year's Fall Frolic, featuring amateur boxing, were outstanding. Part of the evening's success was also due to contributions of: (Color TV) Cincinnati Milacron, Rakar, Nissei of America, Moselle Insurance; (Refreshments) Plastech Alloys, Polychrome, Hercules, Monsanto, IMPCO, I.M.S.; (Golf Clubs) P.M.S.; (Radio) C & G Plastics; (Tickets) J. W. Plastics Equipment.

LAS VEGAS '76 for Reinforced Plastics



REINFORCED PLASTIC GASOLINE TANKS ready to be installed at a Riverside, Calif. service station



FISTS FLY AT THE FALL FROLIC. 10 amateur events, organized by Joe Kiernan (P.M.S.) highlighted Southern California's annual social frolic.

The Western Reinforced Plastics Composites Institute already has a reputation for high-quality conferences. That is why members of the group are already focusing their attentions on an in-depth, basic information program for end-users of corrosion resistant plastic structures for an April 27-30, 1976 Convention. In a recent meeting, the executive board approved Caesar's Palace as the site.

Dr. Frank Cassis (Amoco), conference chairman, says that the two-and-a-half-day technical meeting will present the advantages of corrosion resistant plastic products from actual case histories. Today, as plastics often come under close scrutiny from the public, positive examples of their superiority over natural products, should be a definite contribution. Special mailings will be designed with the intention of attracting engineering firms, contractors, and other end-users. The idea for this type of focus comes mainly from the success of RP/C's 1972 conference featuring reinforced pipe.

...the next stage, and readers' suggestions are encouraged. A call for papers will be the next step. Dave Dubbeil (Goldsworthy Engineering), RP/C chairman, says plans are initiated early to ensure the depth of quality everyone really wants in such a conference.

Pacific Northwest Chapter Meeting with John Shaw on Effective Management Communications (2 persons) and, following dinner, New Memory Techniques, Linzen Search Thunderbird, Portland, Oregon.

So. California Chapter Meeting with Don Bryan, on SPI's role in combustibility and vinyl chloride, Marriott Hotel, Los Angeles.

No. California Chapter Meeting with Don Bryan, on SPI's role in combustibility and vinyl chloride, International Inn, San Francisco.

Conference on plastics and the fire problem sponsored by Technology Conference in cooperation with SPE, Hacienda Hotel, El Segundo, California.

So. California Chapter SPI/SPE Annual Holiday Ball, Marriott Hotel, Los Angeles.

No. California Chapter Annual Holiday Ball, Menlo Country Club, Redwood City, California.

32nd Annual Western Section Conference, Hyatt Regency, San Francisco, California.

RUSSIAN PAINTING TRAVELED ABROAD

Marlborough Head Cites
Trips to Liechtenstein

By EDITH EVANS ASBURY

"Untitled, 1954," a Mark Rothko painting that rose in price from \$18,000 to \$180,000 within six months after it was acquired here by a Marlborough Gallery, went through the hands of two Liechtenstein corporations and traveled to Toronto and back within three weeks after Marlborough's initial acquisition, according to testimony yesterday.

The testimony was elicited from Frank K. Lloyd, head of the international complex of Marlborough galleries and companies by Edward J. Ross, lawyer for Mr. Rothko's 23-year-old daughter Kate. She and her 10-year-old brother, Christopher, and the state's Attorney General, Louis J. Lefkowitz, seek to cancel contracts by which Marlborough A.G., a Liechtenstein corporation, bought 100 Rothko paintings and Marlborough Gallery, Inc., New York obtained consignment of 700 to be sold at 50 per cent commission.

"They seek cancellation of the contracts and dismissal of the three executors who made it on the ground that the price of \$1.8-million for the 100 paintings—an average of \$18,000 each—and 50 per cent commission on the 700, fraudulently wasted the assets of the estate.

"Untitled, 1954," bought by Mrs. Paul Mellon for \$180,000 in November, 1970, was among 72 paintings on an invoice identified by Mr. Lloyd on his second day on the witness stand in Surrogate's Court.

Sixty-one of the 100 Marlborough A.G. had bought May 21, 1970 from the Rothko estate were also on the invoice. It showed that on June 12, 1970, the 72 paintings were sold to Marlborough Gallery of New York by Société Anonyme, a company of Liechtenstein.

New Cancer Cases Widen Fears on Vinyl Chloride

By JANE E. BRODY

Four new cases of angiosarcoma of the liver have just been uncovered. They raise for the first time the possibility in the minds of public health officials that this fatal cancer hazard that has been linked to vinyl chloride may extend to hundreds of thousands of workers and to members of the general public.

Hitherto, the cancer risk associated with vinyl chloride, a basic chemical in the plastics industry, has been confined to the approximately 6,500 American workers who make vinyl chloride or convert the chemical to its polymer, polyvinyl chloride. Since January, when the hazard was first revealed, 19 cases of this invariably fatal cancer, which is extremely rare in the general population, have been uncovered among vinyl chloride workers here and abroad.

Among the newly revealed cases of angiosarcoma of the liver—three in New York State and one in Connecticut—are a worker who for 30 years made electrical wire insulation from polyvinyl chloride resin and a woman who for nearly 30 years lived four blocks downwind from a polyvinyl chloride manufacturing plant.

the estate," he commented.

The two Liechtenstein companies through which "Untitled, 1954," and the 71 other paintings passed are among nine there, four in Switzerland, and galleries in Toronto, Montreal, Zurich, Rome, London and Tokyo controlled by Mr. Lloyd through family trusts, according to his testimony.

That control is absolute, he made clear, but he brushed off questions about day-to-day operations of individual companies.

Public health officials are currently intensively investigating these cases because of their potential implication of a much more widespread hazard than previously suspected.

Although precise numbers are not known, informed sources estimated that hundreds of thousands of workers are engaged in the processing of polyvinyl chloride, generally known as PVC, into countless consumer and industrial products, including paints, furniture, floor tiles, clothing, food packages, dentures, garden hoses, pharmaceutical products, construction pipes and insulation.

In addition, countless individuals with no occupational exposure to vinyl chloride or its polymer live in the vicinity of the 14 plants that make vinyl chloride and the 35 plants that make PVC.

The Environmental Protection Agency estimates that 300 million pounds of vinyl chloride escape into the environment each year as a result of this manufacture. Yesterday, the agency asked the 27 manufacturers involved to submit "process, emission and air quality data" to help it develop air pollution control standards for vinyl chloride in accordance with the Clean Air Act of 1970.

"If I had to recall all of these things, I couldn't do any business," Mr. Lloyd said. In New York, he added, he has more than 20 employees to take care of office operations.

Mr. Lloyd said he kept in daily touch by telephone with the New York gallery except when he was traveling in Asia, where he said telephone communication was difficult. When he is at his home in Nassau, the Bahamas, Mr. Lloyd said, he sometimes telephones twice a day, "if it is rainy, and I am bored."

The agency has detected vinyl chloride up to half a mile from a PVC plant, as well as along a highway in Pasadena, the heart of the largest vinyl chloride producing region in the United States.

Other potential sources of exposure to this chemical have been the dozens of aerosol consumer products, including hair sprays and household esticides, in which for years vinyl chloride was used as a propellant. Nearly all such products have been recalled in the last month.

The new cases of angiosarcoma of the liver turned up in a search of records of cancer registries in New York State and Connecticut.

The New York registry contains a total of six cases of this disease, all six having lived in the Buffalo area, near where a large Goodyear plant has been making PVC since 1946. There is also a preliminary report of a seventh case in the Buffalo area. Three of the New York cases are men who worked at the Goodyear plant in Niagara Falls, but neither there are all women who had no known occupational exposure.

Case in Connecticut

According to officers of the Center for Disease Control, one of the New York women who died in January at the age of 62, had lived four blocks south-east of the Goodyear plant since the end of World War II. She also had her hair done each week for at least 20 years, although the beauty salon she patronized told officials they did not use vinyl chloride-containing hair sprays.

The Connecticut registry has accumulated a total of eight cases of angiosarcoma of the liver since 1935. Dr. Barbara Christine, director of the regis-

try, told The New York Times. One of those, a man who died last July at the age of 60, had worked for 39 years at the General Electric plant in Bridgeport.

According to a company spokesman, for the first 30 years of the man's employment, he operated machines that processed plastic ("quite probably PVC"), rubber and other materials into insulation.

The company, which this week notified the National Institute for Occupational Safety and Health about the case, has begun medical tests, including liver function studies, of all employees exposed to any known level of vinyl chloride, the spokesman said.

The institute said it was consulting with the company about further studies, and the Center for Disease Control is investigating the other cases in the cancer registry. Dr. Irving J. Selikoff, director of the Environmental Science Laboratory at Mount Sinai Hospital here, commented that "any one case could be a coincidence and more information is needed to define the precise risk. However, the new cases point to the urgent need for research to clarify the situation."

MAN, 21, IS KI IN DEPOT ARC

A 21-year-old man identified as Robert Munson and said his body was found in a men's room terminal on Eighth Avenue between 40th and 41st Streets.

The police identified him as Robert Munson and said his body was found in a men's room terminal on Eighth Avenue between 40th and 41st Streets.

According to the police argument in the men's room to the stabbing, but the dispute was not known until 12:15 A.M., before the man in the men's room, Nettle, a suspect in the case, allegedly quarreled with a man in the IND subway station at 23d Street and, according to the police, pushed him off the platform. The man, identified only as Dario Corrao, Queens, sustained minor injuries, the police said.

Mr. Nettle is 27 and lives at the Adelphi Hotel, 470 West Street. He was seized by police following a fight on Eighth Avenue and 23d Street. Because he had a seven-inch hunting knife in his possession, he was questioned about the stabbing in the terminal.

The police said the suspect had admitted having an argument with Mr. Budd in the men's room.

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SP1

Two More Deaths Reported

Vinyl Chloride Cancer Probe Widens; Vast Threat Feared

By Jane E. Brody

NEW YORK, June 2 (NYT).—Four new cases of angiosarcoma of the liver have just been uncovered. They raise for the first time the possibility in the minds of public health officials that this fatal cancer hazard that has been

linked to vinyl chloride may extend to hundreds of thousands of workers and to members of the general public.

Heretofore, the cancer risk associated with vinyl chloride, a basic chemical in the plastics industry, has been confined to the approximately 6,500 American workers who make vinyl chloride or convert the chemical to polyvinyl chloride. Since January when the hazard was first revealed, 19 cases of this invariably fatal cancer, which is extremely rare in the general population, have been uncovered among vinyl chloride workers here and abroad.

Among the newly revealed cases of angiosarcoma of the liver—three in New York state and one in Connecticut—are a worker who for 30 years made electrical wire insulation from polyvinyl chloride resin and a woman who for nearly 30 years lived four blocks downwind from a polyvinyl chloride manufacturing plant.

Intensive Investigation

Public health officials are currently intensively investigating these cases because of their potential implication of a much more widespread hazard than previously suspected.

Although precise numbers are not known, informed sources estimated that hundreds of thou-



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The Sun

A New Twist In Fish Tales

ORICK, Calif., June 2 (AP).—Fishing enthusiasts gathered here today to unveil a five-ton redwood sculpture in memory of a one-pound salmon.

The dedication ceremony was staged in front of the Humboldt County Prairie Creek Fish Hatchery. It was there, 10 years ago, that a silver salmon nicknamed Indomitable defied both probability and modern plumbing by swimming from a stream through a maze of drainage pipes back into the hatchery's rearing pond where he was born.

Gunmen Yield

SP1-26856

In U.S. After TV Interview

RANCHO CORDOVA, Calif., June 2 (UPI).—Two teen-aged gunmen stormed into a crowded bank Friday, took 24 hostages, collected \$1-million ransom, then surrendered when police promised to put them on television.

The hostages, including three men, 18 women and three small children, were released unharmed.

In the television interview, the gunmen, Michael Madigan, 18, and Brian James Young, 19, said they had no food or jobs and needed money.

A television reporter and cameraman were allowed into the bank five hours after the two young men went in. The television crew came out 30 minutes later and said the bandits promised to give themselves up if they could tell their story on television.

The reporter, Bill Harvey, said, "They wanted to tell their story to the community."

Only minutes before the newsmen were allowed in the bank, an unarmed policeman pushed three grocery carts full of currency—\$1 million—up to a night deposit slot of the bank and dropped in bundle after bundle of cash.

Madigan was described as a high school dropout. Police said both of the youths had minor juvenile records but had not committed any major offenses.

One of the freed hostages, Mrs. Guerrina Akley, 31, said the bandits taped a shotgun to her neck and forced her to lie on the floor.

"They said they wanted money and they said they wouldn't hurt anyone if they got it," Mrs. Akley said.

chloride, generally known as PVC, into countless consumer and industrial products, including paints, furniture, floor tiles, clothing, food packages, dentures, garden hoses, pharmaceutical products, construction pipes and insulation.

In addition, countless individuals with no occupational exposure to vinyl chloride or its polymer live in the vicinity of the 14 plants that make vinyl chloride and the 35 plants that make PVC.

The Environmental Protection Agency estimates that 300 million pounds of vinyl chloride escape into the environment each year as a result of this manufacture. The agency has asked the 27 manufacturers involved to submit "process, emission and air quality data" to help it develop standards for air pollution control of vinyl chloride in accordance with the Clean Air Act of 1970.

The agency has detected vinyl chloride up to half a mile from a PVC plant, as well as along a highway in Pasadena, Calif., the heart of the largest vinyl chloride producing region in the United States.

Other potential sources of exposure to this chemical have been the dozens of aerosol consumer products, including hair sprays and household pesticides, in which for years vinyl chloride was used as a propellant. Nearly all such products have been recalled in the last month.

6 Die on Spanish Train

TOLEDO, Spain, June 2 (AP).—Six persons were killed and 17 were injured Friday when a passenger train hit the rear of a train carrying explosives and war materiel, the Civil Guard reported.

Into the

WASHINGTON, June 2.—The Supreme Court finally entered the affair. For all the b four-sentence ruling, that the court would expedite hearing to Jaworski subpoena. Implications were potent. The questions were: Friday's ruling would why the court issued.

Technically, the court meant that special Leon Jaworski, who's hearings, had made that the dispute over poena was of "such public importance": "immediate settlement court.

Mr. Jaworski had expedited hearing on that it was necessary of the Watergate case were to start on schedule.

To a number of observers, this was no reason for the court normal procedures to effect a speedy hearing designed for emergency.

Moreover, some observed that the ruling would have far more important presidential impeachment proceedings than on trial.

First Question

The first question ruling—the question—was impossible to answer. But there of potential answers on the court's evidence on the case.

The court might of Mr. Jaworski, aident Nixon to accept subpoena. If it would have severe could comply with ignore it, or, as of Yale Law School telephone interview special new.

U.S. Navy Accused of Hiding Grumman Design of F-14s

REUTERS

been weaker than that of organized labor and various scientific groups, which back the tough rules.

Doom for the Industry?

At this week's hearings, however, the industry is expected to argue strongly that the "no-detectable" exposure plan would spell doom for the several dozen plants that make vinyl chloride gas or turn it into polyvinyl chloride powder or resin, and for most of the hundreds of plants that turn polyvinyl chloride into plastic products.

The standard would require that most operations in the production of vinyl chloride and polyvinyl chloride, which employs an estimated 8,500 workers, be conducted in closed-off, regulated areas where exposure can be controlled by ventilation devices or other methods. In addition, some operations of plants turning polyvinyl chloride into products, which are said to employ up to 700,000 workers, would be subjected to similar stringent engineering rules if those operations could cause the polyvinyl chloride powder or resin to release trapped quantities of raw vinyl chloride gas.

Last week the Society of the Plastics Industry, a trade group, asserted that sufficient technology doesn't exist to meet the proposed standard and warned that much of the vinyl and polyvinyl chloride industry might have to close if the standard goes into effect. The society predicted that 1.8 million jobs and "at least \$55 billion" in sales and production could be lost.

Ralph Harding Jr., president of the society, said that the proposed standard "is technologically infeasible to achieve, even

which makes plastic trim for several big auto makers, warned that the new rules could cut off its supply of PVC resins, ending its production and causing it to risk lawsuits by Detroit for failure to fulfill supply contracts. The firm, an officer wrote, "would undoubtedly be forced into bankruptcy."

Hubbard Apiaries, a beekeeping company in Onsted, Mich., wrote to declare that it couldn't remain in business if PVC supplies were threatened because its honey is sold in PVC bottles and glass bottles are scarce as a result of a soda-ash shortage.

In fact, many of the letters contended that PVC is already in short supply, highly versatile and absolutely necessary for a variety of important uses.

Spokesmen for the record industry insisted that the plastic is vital to its operations. MCA Records Inc. contended that if

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SP1 FILE

Debating Health vs. Jobs

Plastics Industry Mobilizes to Thwart Tough Rules on Handling Vinyl Chloride

By WALTER MOSSBERG
Staff Reporter of THE WALL STREET JOURNAL

WASHINGTON — As the federal government moves closer to adopting stringent controls over handling of the ubiquitous industrial chemical vinyl chloride, manufacturers who use it are mobilizing to try to show that the controls would prove economically disastrous.

The rules would be utterly unworkable, the companies say, and industry would lose an essential manufacturing material. In consequence, they add, makers of plastic pipe, auto parts, phonograph records and many more products would be driven to the wall. And, they contend, thousands of jobs would vanish.

This gloomy picture is likely to dominate Labor Department hearings, beginning today, on planned standards for eliminating the exposure of plastics-industry workers to the chemical, which is suspected of causing cancer.

Exposure to vinyl chloride, a gas, has been linked by researchers to 19 cases of a rare liver cancer, angiosarcoma, among workers handling it in the U.S. and other countries; in 16 of these cases, death resulted. In addition, angiosarcoma has recently been blamed for the death of two employees in U.S. plants handling polyvinyl chloride, the powdered derivative of vinyl chloride that is fabricated into a wide range of plastic products. (Two other deaths from angiosarcoma have been discovered among people living in the vicinity of plants using polyvinyl chloride.)

In April, the Labor Department's occupational safety and health administration imposed a temporary emergency standard limiting workers' exposure to vinyl-chloride gas to 50 parts per million in the air they breathe, a sharp reduction from the previous limit of 500 parts. Now, the agency is proposing—and witnesses at this week's hearings will debate—a standard cutting exposure permanently to "no detectable" level at all.

Although the plastics industry opposed

with the highly sophisticated methods of in-plant control that have been developed by the industry over the years. If the proposed "no-detectable-level" standard is adopted, the vinyl chloride and polyvinyl chloride resin producing industries will be forced to close down immediately."

A number of labor-union and occupational-health experts are expected to dispute the society's claim at the hearings. They contend that it is possible to meet the standard without closing the industry.

But harsh predictions are contained in many of the more than 125 letters from plastics firms already on file with the Labor Department. The letters, representing the writers' formal "comments" on the planned rules, give an indication of the probable tone of this week's hearings. Although most letters concede that some controls are needed on vinyl chloride, most contend that the proposed measures would mean nothing less than the collapse of their industry.

Almost all the letters come from users of polyvinyl chloride, or PVC, and not companies directly handling vinyl chloride itself or those turning it into PVC. In most cases, they explain that their suppliers of PVC have told them the standards will make it impossible for them to continue producing the raw plastic. Urged to write to the government, the PVC users have done so, forecasting their financial ruin.

"Unless a reasonable approach is taken," wrote Frank Groeneveld Jr., president of a plastic-pipe-extruding firm in Florida, "it could mean the destruction of many small businesses such as ours where we have invested our life savings."

R. J. Clayton, chairman of Louver Drape Inc., a California maker of PVC window blinds and folding doors, wrote that "27 years ago, at the depth of the depression, I started a one-man business which has grown today where we do approximately \$7 million worth of business and employ over 250 people." If the new rules are imposed, he said, "we'd be back to a one-man business overnight."

the standards forced PVC production to end, "our industry would be forced out of business."

The National Association of Home Builders said the standards could drive the rising costs of housing even higher by forcing builders to abandon economical PVC housing components. It warned that such a development could mean "sorely needed housing would be beyond the reach of an increasingly large segment of the public."

Norton Co.'s plastics and synthetics division, which makes tubing for medical uses, warned that if the new rules curbed supplies of PVC, desperately needed equipment used in kidney dialysis and heart surgery might become unavailable. And Graniteville Co. of Graniteville, S.C., a maker of fire-retardant tents and tent material, called PVC "the most important component" in its products.

What's more, Arthur Culbertson, a Florida plastics executive, and Gerald Kessler, an officer of an Ohio plastics company, urged modification of the proposed standards on the grounds that they themselves had had long personal exposure to vinyl chloride without ill effects.

Most of the letter writers acknowledged the need to protect workers from the possibility of liver cancer. But they urged delay in imposing such harsh restrictions, both to give scientists time for further research and to allow the businesses to phase in the new controls.

But one writer took a decidedly less sympathetic view of the dangers of death from vinyl chloride. Jameson Crane, of Crane Plastics Inc., in Columbus, Ohio, wrote, "We continue to be impressed with the comparison of the number of deaths annually due to suicide prompted by loss of jobs, versus the 19 angiosarcoma deaths world-wide over 25 years of PVC production."

Castle & C To Buy F

By THE WALL STREET
JOURNAL
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U.S. Unit Defends Vinyl Chloride Curbs, Saying They Aren't Too Hard on Firms

By a WALL STREET JOURNAL Staff Reporter

WASHINGTON — A Labor Department report disputed the plastics industry's claim that a proposed government standard for restricting handling of vinyl chloride would force numerous plastics plants to close.

The industry has contended that the proposed ruling, which would bar exposing workers to any "detectable" amount of the chemical, can't feasibly be met, and the industry warns that adoption of the ruling would close down the large part of the plastics industry that uses vinyl chloride and its derivatives as raw materials.

But the government report says that evidence to date doesn't indicate "that promulgation of the proposed standard will stop vinyl chloride production and use."

The report, a draft version of an environmental impact study on the proposed strict vinyl chloride standard, was made public yesterday at the start of a week of hearings on the standard. The hearings are expected to be dominated by plastics-industry spokesmen questioning the scientific research on vinyl chloride and warning of economic disruption if the standard is issued.

Vinyl chloride, a gas, is thought to be responsible for 21 world-wide cases of a rare and fatal liver cancer, angiosarcoma. Tens of thousands of U.S. workers are directly and indirectly exposed to the chemical daily because it is the base product from which companies make polyvinyl chloride, a powdery substance used to form a multitude of everyday plastic products.

In April, the Labor Department cut workers' allowable exposure to vinyl chloride to 50 parts per million in the air they breathe. The proposed rule being debated at the hearings would also bar "detectable" exposure to the chemical.

The study concedes some plants could be "closed" if the standard is required, "a great" companies may help pay for improved equipment needed to meet the standard, and much progress on handling "poor houses" of maintenance. It concludes that "substantial" development appears to be needed. The "conclusion" is that "the industry" will "be able to meet" the standard.

agreement reached earlier this year with United. In that agreement, mechanics received pay increases and cost-of-living adjustments totaling about 17% spread over 28 months through Oct. 31, 1975.

Rossmoor to Get Settlement Of \$4.2 Million From U.S.

LAGUNA HILLS, Calif.—Rossmoor Corp. said it will be paid about \$4.2 million by the federal government under stipulated settlement of a 1967 claim filed by the developer of retirement and adult communities with the U.S. court of claims.

That claim said the Department of the Navy and the El Toro Marine Corps Naval Air Station had, in effect, blocked development of some property owned by Rossmoor at its Leisure World development here by imposing restrictions on its use. The land lies beneath a landing approach path to El Toro.

Rossmoor demanded compensation from the government and was be-

last Sept. 1, increases the pay of top-rated mechanics in six steps from \$6.60 an hour to \$7.69 an hour as of Nov. 1, 1975, a jump of nearly 17%. In addition, Eastern's employees would receive two cost-of-living increases of 10 cents each during the agreement, which runs through Dec. 31, 1975.

The Eastern pact basically follows earlier settlements between United Air Lines, Northwest Airlines and American Airlines, and their mechanics, with the exception of a two-month delay in one step increase and a two-month longer duration which includes a five-cent-an-hour increase.

Nonunion Boosts

In addition, Eastern told its 13,000 non-union employees that they will receive pay increases effective July 1 this year. Eastern previously had frozen salaries of nonunion employees during 1974. The company said these increases will cost about \$3 million over the final six months of this year. The increases vary according to job categories, but appear to average 6% to 8%.

Pan Am Reaches Accord on Contract For 11,300 Employees

A WALL STREET JOURNAL News Roundup
Pan American World Airways and the Transport Workers Union agreed on a new contract.

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SP1

FILE

THE NEW YORK TIMES, THURSDAY, AUGUST 22, 1974

NEW PERIL FEARED IN VINYL CHLORIDE

Doctor Says Data Hint Link
With Genetic Damage

By DAVID BURNHAM
Special to The New York Times

WASHINGTON, Aug. 21—A respected medical researcher testified today that there was growing evidence that vinyl chloride, the raw material from which many plastic products are made, might cause both genetic damage and birth defects.

Dr. Irving J. Selikoff, professor of environmental medicine at the Mount Sinai School of Medicine of the City University of New York, gave the testimony at hearings of the Senate Commerce Subcommittee on the Environment.

A second witness, Dr. Joseph Wagoner from the National Institute for Occupational Safety and Health, further testified that recent tests strongly suggest that vinyl chloride might heighten the risk of cancer in the respiratory system, the blood-forming tissues and the brain and central nervous system.

The chemical has already been shown to cause an unusually high rate of a rare kind of liver cancer among workers exposed to it during the manufacturing process.

The hearings, headed by Senator John V. Tunney, Democrat of California, were held in a week when House and Senate conferees ended a nine-month stalemate and began trying to work out compromise language for a toxic substance bill.

Purpose of Legislation

This legislation is designed to provide a mechanism for testing industrial chemicals, consumer chemicals and all agricultural chemicals with the exception of pesticides before they are sold in the market place.

The technique of changing vinyl chloride into polyvinyl chloride was discovered about 50 years ago. Since the end of World War II, polyvinyl chloride has become the second most used plastic in the United States, in such items as upholstery materials, automobile interiors, electric cable insulation, water pipe, film, tiles and floor covering and phonograph records.

At present in the United States, 14 plants employing 1,500 workers produce vinyl chloride, 37 plants employing 5,000 workers transform vinyl chloride into polyvinyl chloride and hundreds of thousands of workers are employed in compounding the polyvinyl chloride into useful products.

Last January, Government scientists learned that a number of employees at the B. F. Goodrich vinyl chloride plant in Louisville, Ky. had died of the rare form of liver cancer. Since then, several studies have been initiated, hairsprays and cosmetics using vinyl chloride as a propellant have been banned, and rules reducing the exposure of workers to the chemical have been proposed.

During today's hearing by the environmental subcommittee, Dr. Selikoff said that it had now been proved that vinyl chloride, long assumed to be benign, was not.

"I regret to say," the researcher added, "that early findings indicate that vinyl chloride may be mutagenic, as well as carcinogenic."

Noting that the evidence was limited and required extension and confirmation, Dr. Selikoff said laboratory tests conducted in New York and Sweden had indicated that vinyl chloride may affect the strands of material that carry the continuity of the human race from generation to generation.

Dr. Wagoner, director of field studies of the National Institute for Occupational Safety and Health, said the initial studies had found that death from liver cancer among workers exposed to large amounts of vinyl chloride occurred 12 times more frequently than would normally be expected.

But Dr. Wagoner added that the most recent results indicated that the unusually high level of cancer were not limited to the liver. "At this stage of our research, a 57 per cent increase in deaths due to cancer beyond what would be expected already has been observed," he said.

SPI-26861

WILLIAM T. CRUSE & COMPANY

European Plastics News July 1974

Liver cancer risks associated with the processing of PVC very low

THE RECENT DISCOVERY of a link between inhalation of vinyl chloride monomer (VCM) and a rare form of cancer—angiosarcoma of the liver—is primarily due to research work initiated by a group of manufacturers from Western European countries and started in Italy in 1971. This correlation has led to a degree of sensationalism relating the use of PVC and its contact with humans as a hazard to be avoided at all costs. In truth, the hazards to consumers and users of PVC products are virtually nil; very small risks may be apparent to workers in poorly ventilated processing/comounding plants; whilst the safety standards in polymerization plants are now much higher than existed some 20 years ago when it is thought excessive contact with VCM may have initiated deterioration of the human liver to cause deaths by angiosarcoma that are only now being verified.

Following a paper published in the *Journal of Cancer Research* in 1971 suggesting that VC monomer could cause cancer of the lung in rats, four European manufacturers of PVC sponsored a research programme by Professor Maltoni at the University of Bologna. A few months later an epidemiological study of workers at major PVC polymerization plants in GB commenced and this has since been extended to cover all GB manufacturers. The GB study showed no increase in cancer of any sort amongst VCM workers although Maltoni's work began to show this very rare form of liver cancer, angiosarcoma, in rats. This provided some data for consideration but at this stage there were still no signs of any risks to human beings.

Despite this the experiments of Professor Maltoni were increased and inter-Governmental authorities informed; particularly those in the USA who were then able to organize a much larger epidemiological survey than that possible in Great Britain. Since more widespread investigations began during mid-1973 there has been, to date, 18 diagnoses of angiosarcoma in process workers on PVC plants in the US and Europe of which 16 have proved fatal. Of this total, 12 cases were in the US with seven having occurred on a B F Goodrich plant and three at a Goodyear Tyre & Rubber Co location. The average exposure time to VC monomer of the individuals had been about 20 years at very much higher exposure levels than that normal by general standards in January 1974.

More risks are apparent on PVC polymerization plants rather than during VCM manufacture as only one case of angiosarcoma has been confirmed amongst the latter type of worker. There seems to be a definite link between PVC autoclave workers—particularly those involved in scrubbing out autoclaves—and confirmed liver cancer diagnoses. Exposure levels on early production plants up to about 1955 are estimated to have been 1 000 parts per million (1 000ppm) of vinyl chloride in the atmosphere.

Safety standards have obviously been increasing since then so that average levels of exposure for process workers in 1973

FILE 5A1

were 300ppm. At the present time average exposure levels are down to 50ppm and further improvements by major plant modifications should get levels down to 10ppm—or on very new plants even 5ppm. Thus for PVC production from VCM there is a large safety area between levels now and in the future when compared to those conditions when it is thought angiosarcoma was first contacted by workers. However, whilst it was the very rare nature of angiosarcoma that provoked the epidemiological research it must be pointed out that levels of 50ppm are not known to be a safe concentration level—just much improved from 1 000ppm. Rats, in fact, do contract liver cancer at an exposure level of 50ppm but there is no proven link between animals and humans.

Whilst safety conditions for PVC process workers have undergone significant improvement and are also being further dramatically increased, the issue is much clearer and far safer for processors, fabricators and the general public. Tests have shown that average exposure levels in the fabrication industry are about 5ppm and where this is exceeded, mainly in compounding areas, improved ventilation should ensure reduction to a level of 5ppm or below. The quantity of vinyl chloride absorbed in the average diet is 0.001ppm of the diet which would necessitate a life span of 1 800 years to absorb 1g of vinyl chloride.

Thus, in summary, it can be seen that the incidence of angiosarcoma is low; particularly if the 10 deaths from two US plants are separated out—but not ignored. The incidence has only occurred amongst PVC polymerization process workers (with one exception on a VCM production unit). Safety conditions on plants have been dramatically increased for present day workers in comparison to those accepted at the time of the 18 angiosarcoma cases and are being still further improved in the next six months. Exposure levels to VCM in processing and fabricating plants are significantly below those generally accepted on polymerization plants today and it should be pointed out that animal experiments have shown a very marked dose/response relationship. Finally, whilst it is impossible to prove zero risk, the concentrations of VCM being absorbed by the public from handling PVC and eating food wrapped in PVC film are so low as to be negligible.

In GB the Chemical Industries Association published last month an advisory note for the guidance of PVC processors. This summarizes all data now available concerning operations which may involve the release to working atmosphere of residual monomer in PVC polymer. It indicates where suitable ventilation should be considered (if not already installed) to remove as much as possible of the small quantity of VCM which may be present. The note coverage includes general background information; warehousing PVC compounding operations and PVC fabrication processes.

Tough week for vinyl

Suspected hazardous effects of vinyl chloride continued to be a prime topic of concern on several fronts last week.

The Senate Commerce Committee Subcommittee on the Environment expects to use new data on vinyl chloride toxicity, reported at its hearings last week, to press for quick agreement with the House on a toxic substances act. For months, two versions of such legislation have been lodged in a House-Senate conference dispute over premarket screening of chemicals.

Senator John V. Tunney (D., Calif.), who seeks a tough bill, is expected to lean heavily on last week's testimony by Irving J. Selikoff of the Mount Sinai School of Medicine (New York). Selikoff maintained that vinyl chloride "may also be mutagenic—that is, may affect the strands of material that carry the continuity of the human race from generation to generation." He declared that an examination of chromosomes in a group of 11 workers exposed to vinyl chloride showed chromosome changes to "be present considerably more frequently than expected."

In addition, Selikoff detailed the findings of an Ohio State Dept. of Health study, which he said indicated increased birth malformation rates in three Ohio counties where vinyl chloride plants are located.

Much of the other testimony at the subcommittee hearings focused on the suspected link between exposure to vinyl chloride and angiosarcoma, a rare liver cancer.

Joseph Wagoner, director of field studies for the National Institute for Occupational Safety and Health, noted that the number of deaths attributed to liver cancer, out of a sampling of medical records of 109 vinyl chloride workers who died in the 1950-1973 period, was "12 times the number expected."

Theodore R. Torkelson, a Dow Chemical toxicologist, explained to the subcommittee some of the vinyl chloride research the Manufacturing Chemists Assn. is conducting. He said that two types of vinyl chloride studies are being contemplated, in addition to those already under way.

The first would try to ascertain dose-response relationships for vinyl chloride. The second would investigate the potential for long-term, delayed responses to single, massive exposure to the chemical.

"The known potential of harm from vinyl chloride justifies stringent precautions

August 28, 1974 CHEMICAL WEEK 13



NEW PVC PLANT is being built by Firestone next to existing Perryville, Md., unit.

A vote for PVC

Firestone Plastics reported last week that it has begun construction of a "multimillion-dollar" dispersion-grade polyvinyl chloride resins plant adjacent to its PVC installation in Perryville, Md. When the unit is completed in mid-1975, its output—along with some improvements at Firestone's Pottstown, Pa., PVC unit—will increase the company's PVC capacity to 450 million lbs./year from the current 400 million, a spokesman says.

The new plant will employ the emulsion polymerization process. The existing Perryville operations, built in 1968, use suspension polymerization.

Firestone's move to increase PVC capacity comes as the Occupational Safety and Health Administration continues to study the possibility of imposing a "no detectable level" standard for exposure to vinyl chloride in all VCM and PVC installations. Firestone's plans, like B.F. Goodrich's decision last month to build a new PVC plant, would seem to be an affirmation of faith in the continued profitability of PVC manufacture as well as a hint of confidence that OSHA will not promulgate its proposed rigid exposure standard (*CW*, July 17, p. 20).

Firestone asserts that the new Perryville plant will "incorporate the latest and safest equipment and production processes," including an improved ventilation system. The company falls short, however, of saying that the new unit will be able to meet a no-detectable-level standard. "The plant is being engineered to keep the exposure level as low as is technologically possible," it adds.

August 28, 1974 CHEMICAL WEEK 15

W.S.J. Sept 17-1974 **FILE**

Vinyl Chloride Air-Pollution Limits ^{SPI} To Be Established by Environmental Unit

By a WALL STREET JOURNAL Staff Reporter

WASHINGTON — The Environmental Protection Agency said it will establish air-pollution standards for vinyl chloride, but an agency official said a formal proposal on the cancer-linked gas still is six to eight months off.

Although the standards under consideration are still tentative, they would add 4¢, or one cent a pound, to the price of polyvinyl chloride, the white resin produced from vinyl chloride that is used in thousands of plastic products, the EPA estimated.

EPA administrator Russell Train announced the decision to limit vinyl-chloride emissions into the atmosphere after an EPA task force found that industrial sources may be releasing over 200 million pounds of the gas into the atmosphere each year. The task force concluded that emissions from the nation's 15 vinyl chloride monomer plants can be cut 90% and from the 37 plants that use the gas to make the polyvinyl chloride resin, by 75%.

Whether to regulate emissions from the 8,000 facilities that fabricate polyvinyl chloride, or PVC, into a wide range of plastic products hasn't been decided yet, the EPA added. These fabricating plants account for only about 5% of the total vinyl chloride released into the air.

Vinyl chloride has been under government scrutiny since last January when E. F. Goodrich Co., the nation's largest producer of PVC resin, reported that four workers at its Louisville, Ky., plant apparently had died of a rare liver cancer. Reports of other worker deaths and the high incidence of cancer in laboratory rats exposed to vinyl

chloride has strengthened medical suspicions that the gas can cause cancer. Independently of the EPA action, the Labor Department's Occupational Health and Safety Administration currently is considering toughening its vinyl-chloride standards to protect workers inside plants.

When the EPA sampled the atmosphere around selected vinyl-chloride and PVC plants earlier this year, none of the vinyl chloride concentrations detected were as high as the 50 parts per million considered dangerous to health. However, agency officials believe some of the levels measured left too narrow a safety margin for persons living close to the plants.

Bernard Steigerwald, the EPA deputy assistant administrator in charge of developing air-quality standards, said industry, in addition to meeting vinyl chloride ceilings, would be required to undertake additional maintenance, adopt new processing practices and install additional equipment. Assessment of the needed requirements and other technical questions will take six to eight months, Mr. Steigerwald said.

According to the EPA's preliminary calculations, compliance with control requirements will require vinyl chloride and PVC producers to make capital investments totaling about \$80 million and spend \$40 million in annual control costs. Some of these outlays already are under way, though, either by companies acting voluntarily or to meet the Labor Department requirements already in force, the EPA said.

Goodyear, Borden Sued for \$284 Million Over Polyvinyl Chloride Meat Wraps

By a WALL STREET JOURNAL Staff Reporter

CLEVELAND — A class-action suit against Goodyear Tire & Rubber Co. and Borden Inc. asking \$284 million in damages resulting from supermarket use of polyvinyl chloride meat wrap was filed in Cuyahoga County common pleas court here.

The complaint was brought by Florine Schultz, a former meat wrapper for Pick-n-Pay supermarkets, a Cleveland-based chain. It asks \$1 million in damages for Mrs. Schultz and at least 283 other meat wrappers employed at 71 Cleveland-area Pick-n-Pay stores since the chain began using polyvinyl-chloride wrap in 1967.

The suit charges that the meat wrappers "endured chronic exposure to dangerous air contamination from thermal decomposition of polyvinyl-chloride films as it passed over an electric heat wire being used to cut said wrap for packaging," and that the exposure has caused respiratory, skeletal and cardiac injuries. The markets, the suit states, have used Prime wrap, a packaging film made by Goodyear, and Resinite, a Borden product.

In Akron, a Goodyear spokesman said, "Although we haven't been presented with a copy of the complaint, we are prepared to vigorously defend suits of this type." A Borden official also indicated the company hadn't received a copy of the complaint, and said public statements by Mrs. Schultz's attorney that there is a medically proved link between use of the wraps and physical injury are "without foundation."

The federal government this spring imposed strict regulations on exposure to vinyl-chloride fumes in plants making PVC, a solid plastic with many industrial and consumer applications, after exposure to the gas was linked to liver cancer among workers at certain plants. The supermarket meat wraps are made from a PVC resin.

The suit alleges that "as a direct result

of inhalation of the highly toxic films" from cutting the meat wrap, "plaintiffs have incurred extremely irritating damage to the skin, eye, nose, and throat along with shortness of breath, coughing and general respiratory distress, which eventually leads to serious skeletal deterioration with permanent cardiac and brain injury."

Mrs. Schultz's attorney cited a University of California at Los Angeles study reported last November linking fumes from PVC wrap to respiratory ailments.

The attorney said that others exposed to PVC or vinyl-chloride fumes in use or manufacture of other PVC products may later be added as plaintiffs in the suit. He also said other manufacturers of PVC products might be added as defendants, but indicated Mrs. Schultz hasn't any interest in suing the Pick-n-Pay chain, a subsidiary of Cook United Inc. until 1972, and currently privately owned.

In Chicago, a spokesman for the Amalgamated Meatcutters and Butcher Workmen of North America said the union has been concerned for some time about possible dangers connected with wrappers and has discussed PVC products with several manufacturers.

Robert Vandervort, an administrator for the National Institute for Occupational Safety and Health, said institute studies have linked use of the film to minor upper respiratory ailments, but that a connection hasn't yet been established between the wrap and more serious respiratory injury or other major illnesses.

Mr. Vandervort also indicated that PVC represents only a small proportion of fumes given off when the wrap is cut, and that much of the gas is a plasticizer, DI-2-ethyl hexyl adipate. He said that studies haven't pinpointed what chemical causes injuries, but that "probably both" are deleterious.

The institute is preparing recommendations on use of the wrap, he said.



ACTION REPORT

Vol. 1, No. 2

Sept.-Oct. 1978

SPI BLASTS H.E.W. CANCER STUDY; INDUSTRY LEADERS FAULT CALIFANO

The estimate of excess cancer deaths in the U.S. from occupational exposure to vinyl chloride, as quoted by Health, Education and Welfare Secretary Joseph A. Califano from an unpublished study, is "ludicrous to the point of absurdity," said SPI president Ralph L. Harding, Jr., in a statement to the press following the Secretary's remarks before the AFL-CIO National Conference on Occupational Safety and Health on September 11.

Other industry leaders also have chastised the HEW official and condemned the study.

"If the vinyl chloride estimates are any indication of the accuracy of the rest of the report," Harding added, "the document must stand convicted as an embarrassment to medical science and to the government agencies that produced it."

The study was prepared for HEW by the National Cancer Institute and the National Institute of Environmental Health Sciences. It indicates that at least 20 percent of cancer deaths each year are due to occupational factors. Vinyl chloride is cited as being responsible for 1,940 excess deaths.

Contrary to the report, only angiosarcoma of the liver has de-

finitely been linked to vinyl chloride exposure. The Center for Disease Control (CDC) confirms a total of only 23 such deaths in the last 16 years.

Ronald A. Lang, executive director of the American Industrial Health Council, strongly criticized Mr. Califano "for his arbitrary statement quoting an unreleased study."

Robert A. Roland, president of the Manufacturing Chemists Association, has accused Mr. Califano of taking "a cheap shot at the chemical industry" by indirectly blaming synthetic organic chemicals for the estimated 20 percent of all cancer in the U.S.

SPI NEWS BUREAU FILLS NEWS GAP

A new editorial service is now available through SPI's recently created News Bureau. The Bureau will provide member companies with feature stories and corresponding illustrative material on the plastics industry that will be of interest to a general readership.

The need for such a service was evidenced in a poll of SPI's voting representatives, which

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TV CAMPAIGN LAUNCHED

PAC Sponsors Test to Upgrade Public's Image of Plastics

For the first time in its history, SPI is using television to further advance the interests of the plastics industry before the consumer public. A three-month pilot TV advertising campaign, sponsored by the Public Affairs Committee and designed to improve public attitudes toward plastics, began September 25 in Atlanta, Ga. The series of seven 10-second "spots" will run for 13 weeks.

The objective of the test campaign is to build awareness—rapidly and with maximum visual impact—of those applications where plastics perform an essential service in contributing to the health and welfare of people. Complex issues such as toxicity, pollution and energy consumption in the manufacturing process are not included in the campaign.

Two Research Surveys

Public reaction to the campaign will be measured in two surveys of 500 individuals representative of the total adult male and female population in the test market viewing area. The first survey was taken approximately one week before the campaign began. The second one will be taken immediately after it ends in mid-December.

Questioning will be identical

in both rounds of research. It will concentrate on these areas of information:

- Attitude toward plastics as (a) basic and important to American life; (b) valuable, but not essential; or (c) unimportant.
- Immediate, unaided identification of up to three products made of plastic.
- Awareness of any recent advertising of products made of plastic.
- Belief that government at all levels is exercising too much, too little or the right amount of regulatory control over the plastics industry.
- Reasons for that belief.
- Awareness, on an aided recall basis, of specific products made at least in part from plastics and seen in the TV campaign.

Data on the sex, age, income, home ownership, education level and employment status of the respondents also will be obtained.

A report on the impact of the campaign and research findings will be made to SPI four to six weeks after the second research round. Emphasis will be placed

Continued on page 2



Voice-over in TV commercial states: "His horn might be just a memory if we didn't have plastic records. Plastics... think about that." Records are one of seven important uses of plastics covered in the ad campaign now testing in Atlanta.

AS I SEE IT

by Kenneth Schoen, Chairman
SPI Processors' Committee

The largest companies realize they can't protect themselves and the plastics industry alone. So they support SPI and take an ac-



Kenneth Schoen

This is so obvious to me that any question about the advantages of SPI membership seems redundant. To put this in focus, I suggest that each processor in the plastics industry, inside SPI or outside, decide for himself how many of these major problems he can handle by himself:

- Action by federal and state regulatory agencies.
- Anti-plastics legislation.
- Consumer safety, combustibility, worker safety.
- Product liability.

These are only a few of our problems, but even so the answer should be obvious.

We are part of a basic and explosive industry that will continue to grow and to attract difficult problems. The pressure will ease only when our competitors, political opponents, and the general public recognize that plastics are a better material, safer, lighter, more economical, and require less energy than the traditional materials used in the past.

Too many people still consider plastics something we could do without if we had to. We know this is mistaken judgment and we must make them see it, too.

As we look down the road, there's no end in sight for the need to act in the public arena, and SPI is essential for that reason. There is no way for an individual company to fight and win its battles alone.

When we talk to our Representative or Senator, we are talking about jobs in their districts as well

as ours, family incomes in their state as well as ours, and the effect upon these jobs and families of legislation that they must consider in Washington.

Even when the scene of action is in Washington, the small businessman can be important. The OSHA hearings on cancer-causing agents showed that. Some very effective testimony came from processors.

They brought the "big picture" down to its effect upon a real-life business, with jobs, profits, and perhaps even the existence of a whole business at stake.

Annual Report Issued

SPI's annual report for fiscal 1978 was issued on September 25. It includes a full review of the Public Affairs Committee's activities for the year.

In the area of legislative and regulatory activities, PAC monitored nearly 300,000 proposed or introduced bills at both state and federal government levels. Action was initiated where legislation posed serious problems for the industry. PAC's successful defeat of Minnesota's proposed ban on non-returnable plastic milk containers is a case in point.

PAC's technical activities included the 7th Annual Combustibility Symposium, conducted by the Coordinating Committee on Consumer Safety; also, the completion of a two-year study of toxic gas levels in building fires, jointly sponsored by SPI and the National Fire Prevention and Control Administration. In addition, a major Warehouse Fire Test Program was completed.

A total promotion program stressing the essentiality of plastics was undertaken by PAC during the year. Program elements include a Speaker's Bureau, a communications seminar and new literature addressing common criticisms of the industry.

The annual report also contains reviews of SPI's operating unit divisions and committees.

TV AD TEST UNDER WAY

Continued from page 1

on shifts in attitudes toward government controls and on the essentiality of plastics.

Network Affiliates Used

The SPI commercials are seen several times daily on WSB-TV (NBC affiliate), WAGA-TV (CBS affiliate) and WXIA-TV (ABC affiliate). They are aired during the local portions of such network programs as "Today," "CBS Morning News," and "Good Morning, America." Also, "Tonight," "P.M. Atlanta" and the early and late action news, and weekend news-

casts. In addition, some spots are seen during prime daytime viewing hours.

Atlanta has a base total of 893,500 TV households reaching an estimated audience of 2.09 million viewers within the test market area.

The TV commercials were prepared by Young & Rubicam Special Marketing Division, Inc. The company is a subsidiary of Young & Rubicam International, Inc.

SPI's Public Relations Committee reviewed presentations made by two other agencies before choosing Y&R. The TV ad campaign is being supervised by a PAC television subcommittee headed by Robert B. Downey. B.F. Goodrich Chemical Co.

Midwest Section Tackles State Agencies

While the plastics industry works on Washington and Federal regulations, the states have become the new battlegrounds. Each time a new federal regulation is suggested, the state agencies seem to jump on the bandwagon with "me too" proposals. And, to prevent possible federal pre-emption, these always are a bit more onerous.

Following the successes of SPI state groups in Massachusetts and Oregon, SPI's Midwest Section has made state response its prime objective. Highlights of what's happening state by state are reported here by Midwest Section Manager Robert W. Sherman:

Illinois: SPI members provided economic and employment impact statements toward the defeat of proposed legislation to increase electrical rates for industry while reducing consumer rates, and pushed for passage of product liability legislation. A watered down version was finally submitted, so this issue will be re-opened next year.

Indiana: Members plan to address the inventory tax and are watching Wisconsin's tendency to copy Minnesota.

Kansas: A new consumer bill calling for insulation labeling has

been instituted. SPI members are working with the state agency to simplify requirements.

Michigan: Members participated in writing the state safety standards now adopted by Michigan OSHA and were successful in obtaining reasonable requirements. The members now are looking at proposed product liability legislation to formulate a position, and urging revision of workman's compensation laws.

Minnesota: The Plastics in Minnesota Action Committee has been the busiest of all. Recognizing Minnesota as a bellwether state and one that has been unusually anti-plastics, this group set an objective of acquainting the state legislature and various environmental pressure groups with the positive contributions of plastics to lifestyle and the Minnesota economy. A sound/slide presentation was put together and a directory of the Minnesota plastics industry by legislative district is being developed. Plant visits and special presentations are also being planned to make all the pressure groups aware that plastics are important.

Ohio: Major activities in Ohio relate to the state's codes affect-

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DON'T JUST VOTE!

by E.S. Nuspliger,
SPI Governmental
Affairs Director

Vote, by all means. But I'm afraid that just voting is not enough.

All too often, the conscientious businessman looks over the ballot and finds that in most cases he's voting for the lesser of two evils. Nowhere does he find a candidate whose background and record indicate an understanding of and dedication to the free enterprise system.

In the main, it's our own fault. Where were we when the candidates were being selected . . . when the planks in the platforms were being chosen to appeal to the most attractive constituencies? How hard have we worked to be sure that candidates realize that business' viewpoint is important, too? Have we volunteered time, a personal check or personal support to a person with a business interest? Have we even found out whether more such persons could be induced to run for office with our support? Have we done *anything* to improve the quality of the candidates and their attitudes toward the business community?

We are approaching the season when this phrase becomes popular—"I don't intend to vote. They never give me anyone worth voting for." It usually sets this writer off on a lecture about how we can become "they" if we are willing to become involved in the political process for longer than a few minutes a year at the polling place.

I realize that most businessmen are disinclined to participate in politics. It's sort of "dirty business" in their minds. But I submit that politicians have long since sensed this attitude on the part of business and have long resented it. And I further submit that this impression and this resentment are strengthened whenever a legislator is introduced for the first time to a con-

PRESS REPORTS ON SPI TESTIMONY

Cancer Safety Plan Prepared Plastic pipe safety rules 'too stringent'

WASHINGTON, July 13 (UPI)—The U.S. Occupational Safety and Health Administration (OSHA) has prepared a safety plan for plastic pipe that industry officials say is "too stringent" and "unnecessarily costly." The plan, which would require plastic pipe to meet the same safety standards as steel pipe, was unveiled by OSHA on July 13.

offer seeks relaxed

WASHINGTON, July 13 (UPI)—The U.S. Occupational Safety and Health Administration (OSHA) has prepared a safety plan for plastic pipe that industry officials say is "too stringent" and "unnecessarily costly." The plan, which would require plastic pipe to meet the same safety standards as steel pipe, was unveiled by OSHA on July 13.

A stream of news stories reporting the industry's opposition to OSHA proposals flowed out of the hearings after SPI's testimony in July.

Local and regional press coverage of individual members' testimony was part of a publicity effort organized by the SPI Public Relations Department. It focused on 17 states where members are headquartered or maintain plant facilities.

"Our local CBS affiliate, KFVS-TV, which covers portions of four states, carried a story on my testimony on two newscasts on July 13 and on the July 14 morning news," reports M.L. "Les" Christensen, president of Atlas Plastics Corp., Cape Girardeau, Missouri.

Two newspapers with large

circulations in southern Missouri and southern Illinois reported Christensen's testimony, and it appeared in a UPI newswire story that was published in newspapers in St. Louis and other cities throughout the state.

An AP newswire interview with Adolphe J. de Matteo, prior to his appearance at the OSHA hearings, was widely published in New Jersey newspapers. De Matteo is vice president of Thielex Plastics Corp., Piscataway, and has been successfully treated for thyroid cancer.

SPI technical director John R. Lawrence took the opportunity of a radio interview on Station WOSU, Cincinnati, to discuss the economic impact proposed OSHA regulations would have on the plastics industry. "Terrible

business that is important to their districts, and that you have an active and continuing interest in the political scene. You'll find candidates anxious for plant tours right now (they need to meet your people) and this gives you an opportunity to "register" with them. Personal campaign contributions are very timely, of course. And actual electioneering—taking an active part in a campaign—is the best way to make yourself known. Why not

Athens Industrialist Hits OSHA, Cites Danger to Plastics Industry

ATHENS, Ga., July 13 (UPI)—A prominent Athens industrialist has criticized the U.S. Occupational Safety and Health Administration (OSHA) for its proposed regulations on plastic pipe, citing the danger to the plastics industry.

Plan to Ban Some Plastics Under Fire

ATHENS, Ga., July 13 (UPI)—A prominent Athens industrialist has criticized the U.S. Occupational Safety and Health Administration (OSHA) for its proposed regulations on plastic pipe, citing the danger to the plastics industry.

Exempt us: local firms

economic hardships" on the industry was also the subject of an editorial in the *Oklahoma City Times*, following the testimony of E.D. Edmiston, president of Fibercast Company, Sand Springs, and Wayne R. Sorenson, of Continental Oil Company, Ponca City.

Other examples of publicity generated to promote the industry's position on the OSHA issues included radio interviews with Daniel P. Hidding, president of Dana Molded Products, Inc., Arlington Heights, Illinois, on Station WMMM; with Wayne L. Carrick, Chemplex Co., Rolling Meadows, Illinois, on Station WBBM, Chicago; and with Robert Poet, Filmar Division, Vistron Corp., on Station KNEW, San Francisco, to name a few.

try it? Chances are you'll enjoy it—many of our members have.

In November, we will be electing the state legislators who will be making the decisions for the next biennium. They won't be running next year, they'll be legislating. Now is the time to get to know them.

Shouldn't you—and your friends, associates, employees and suppliers—be doing more than just voting?

Think about it.

PRODUCT LIABILITY COMMITTEE FORMED

In a continuing effort to broaden its service to the membership, SPI has formed a committee to recommend future policy on product liability and serve as liaison with other related action groups.



W.J. Norris

A.J. de Matteo

The new Product Liability Committee is sponsored by the Public Affairs Committee. It essentially will make recommendations to the SPI Board, through PAC, on such issues as:

- Specific legislation relating to product liability and follow-up as needed.
- Addressing the insurance issue.
- Reviewing the need for tort reform at the state level and

recommending the types of reform needed.

- Continuing the successful product liability and product safety seminar and other educational programs.
- Monitoring workman's compensation reforms and action in such areas as industrial safety and occupational diseases.

In view of PAC's current responsibility as the external arm of SPI, the Product Liability Committee will have equal responsibility for establishing liaison with such organizations as the U.S. Chamber of Commerce, National Association of Manufacturers, Retort and others which have established some form of product liability programs or action groups.

William J. Norris, Gatto Machinery Development Corp., Hauppauge, New York, was appointed to chair the Product Liability Committee for two years. Adolphe J. de Matteo, Thiele Corp., Piscataway, New Jersey, will serve as the Committee's issues coordinator.

Wanted: Voting Reps to Beef Up Fed Gov't Relations Activities

Q. How can member company voting representatives help make the views of the plastics industry known and felt in the federal government?

A. Volunteer today to participate in SPI's Federal Government Relations Committee (FGRC) expansion program.

Under the guidance of the Public Affairs Committee, the FGRC is broadening its activities to respond quickly and forcefully to anticipated critical issues that will affect our industry. It will focus on Congressional and legislative developments, and assist in special regulatory matters.

In addition, the FGRC will be available to all SPI divisions, sections and other operating units for advise, counselling and assis-

tance in presenting of industry views to government officials.

No cost is involved in program participation.

Volunteers will be requested to assist in Congressional contacts, letter writing, educational efforts and similar activities to enforce the plastics industry's views. As a participant in the SPI legislative support system, voting reps and their companies will receive special reports on key issues for plastics, and take part in collective responses when and as they wish.

For complete details contact Dick Titus, Manager, Federal Government Relations Committee, SPI, 1101 17th St., NW, Washington, D.C. 20036. Tel. (202) 331-0340.

SURVEY SHOWS LOW LOST WORKDAY BASE

A broad-based SPI survey of the plastics industry shows that its lost work-day base is lower than the average reported for American industry as a whole. Days lost because of accidents or illness, however, is higher than the national average.

Some safety engineers had assumed that the accident/illness rate was worse. Better or worse, there has been a lot of guesswork in this area.

The Safety Survey Subcommittee of PAC's Committee on Occupational Safety and Health organized a survey to bring out the facts. Questionnaire replies came from 312 member companies with a combined total of more than 70,000 employees and more than 120 million hours of work exposure.

The data showed 17 incidents per 200,000 hours of work, and 6.4 lost work-day cases per 200,000 hours. Four incidents resulting in death were reported.

The reporting companies were representative of the industry as to size, materials processed, types of processes used, and types of finished products produced and shipped. More than one-half were companies with 100 or fewer employees, also representative of an industry where the majority of firms are termed "small businesses."

Recent developments were reflected in replies to questions on what information/safety aids the companies need from SPI and on specific safety topics.

OSHA, latest statistics and reports on agency actions, led the list of information needed from SPI. On specific safety topics, the companies named safety motivation, fork lifts, personnel protective equipment, and product liability.

SPI ACTION REPORT is produced bimonthly by the Public Affairs Committee of the Society of the Plastics Industry, Inc. 355 Lexington Avenue, New York, N.Y. 10017. Address all inquiries to the Director of Public Relations.

GAP FILLED

Continued from page 1

drew better than a 10 percent response. Of the 165 companies who completed the questionnaire, 149 asked to receive copies of the stories as they are issued.

The News Bureau stories are intended for use in company publications, including employee newsletters, and for distribution to newspapers serving the communities in which the companies are located. They will be generic

If you wish to receive the described materials, send your request on company letterhead to the SPI News Bureau. Be sure to include the following:

1. Name and type of publication (magazine, newsletter, other).
2. Audience, circulation.
3. B&W or color photos preferred.
4. Name and title of person to receive the materials.
5. Areas of editorial interest and desired length of stories.

in nature (company names and trademarked products will be omitted) and written from an industry viewpoint. Companies using the stories can edit them to incorporate their own statistics, and other corporate information.

Asked to name article subjects of broadest interest, a majority of the respondents listed (1) government action to regulate the plastics industry; (2) new market potentials, and (3) industry trends and growth.

Midwest Section

Continued from page 2

ing everything from insulation to plumbing. An SPI strike force will participate in hearings on whether Ohio should adopt separate codes or follow other states in adopting model codes.

If you are not now involved in your state, give Bob Sherman a call (Tel: 312 297-6150). He can tell you what's being done, what's needed, and what your role might be.

SPI ACTION REPORT BULLETIN

Below is the text of a news release issued by SPI, acknowledging OSHA's recognition of SPI's recommendations for a performance-based standard on acrylonitrile. It is followed by the text of the U.S. Department of Labor announcement, also issued on September 29.

SPI CITES OSHA FOR ADOPTING PERFORMANCE-BASED STANDARD ON ACRYLONITRILE IN WORKPLACE

WASHINGTON (September 29, 1978)—A new workplace standard for exposure to acrylonitrile announced today by the Occupational Safety and Health Administration "will protect worker health and recognizes the concepts recommended by SPI," according to Ralph L. Harding, Jr., president of the Society of the Plastics Industry, Inc.

By calling for a performance-based standard, as recommended by SPI witnesses, OSHA recognizes these advantages: improved worker conditions, speedier industry compliance, reduced compliance costs, simplified enforcement for OSHA and a standard which will not become obsolete as technology changes, Mr. Harding said.

Basically, a performance standard mandates levels of safety and allows individual companies to choose the appropriate methods for compliance.

In the case of acrylonitrile, SPI testified, a worker exposure level of two parts per million, averaged over an eight-hour day, is the lowest feasible level from the standpoint of technology and economic feasibility. This is the level that OSHA has now recommended.

Mr. Harding also said OSHA heeded the industry's recommendation to exempt fabricators, based on data showing that those workplaces present no safety hazard.

"While we will have to study the full proposal," Mr. Harding said, "it is our belief that OSHA has drafted a tough but realistic standard."

FINAL STANDARD SET TO PROTECT WORKERS EXPOSED TO ACRYLONITRILE

Worker exposure to cancer-causing * acrylonitrile (vinyl cyanide) has been set at two parts per million parts of air (2 ppm), the same level allowed under the January 1978 emergency temporary standard, the U.S. Labor Department's Occupational Safety and Health Administration announced today.

Assistant Secretary of Labor Eula Bingham said the final standard of 2 ppm averaged over eight hours also sets a ceiling level of 10 ppm for any 15-minute period. The new rule calls for periodic monitoring, medical surveillance and other activities to begin at an "action level" of 1 ppm, and prohibits skin or eye contact with liquid acrylonitrile.

The final standard for acrylonitrile is scheduled to be published in the Federal Register October 3, 1978 and become effective November 2, 1978.

Data from laboratory tests on animals augmented by the

preliminary results of a study of workers exposed to acrylonitrile have established that airborne exposure to this volatile and highly toxic chemical poses a potential carcinogenic risk to humans.

"This standard is intended to minimize the potential for cancer among the 5,000 workers most directly exposed to acrylonitrile," Dr. Bingham said.

"We chose the 2 ppm level because of evidence obtained in the rulemaking process that a 2 ppm level is the lowest feasible level that can be achieved through a combination of engineering controls and work practices."

The new standard requires compliance through engineering controls and work practices alone by November 2, 1980. Training programs must be implemented by January 2, 1979. Other requirements such as measurement of employee exposure, medical surveillance and recordkeeping have November 2, 1978 as their startup date.

The standard calls for employers to develop written plans for compliance programs. Such plans must include a description of each operation or process resulting in employee exposure to acrylonitrile above the permissible limit; an outline of the engineering controls and work practices to be applied to the operation in question; a schedule for implementation of engineering and work practice controls; and other relevant information.

Written plans must be available on request to the Assistant Secretary of Labor, NIOSH Director, and employees or their representatives. The plans must be revised and updated every six months to reflect the current status of the program.

The standard also calls for respirator use until engineering controls can be implemented, and in areas where engineering controls are not feasible.

The standard applies generally to all occupational exposures to acrylonitrile. Acrylonitrile is widely used to produce man-made fibers, synthetic rubbers, plastics, and other goods.

The standard provides exemptions for certain processing, handling and use of acrylic and modacrylic fibers, ABS/SAN and nitrile barrier resins, and nitrile rubbers when such materials are in the form of finished polymers, and certain other materials containing or made from acrylonitrile. The exemption provisions of the final standard contain both a listing of materials which are exempted, and a performance basis upon which materials not specifically listed can be exempted.

The proposals for today's final standard was published in the Federal Register last January. Public hearings were held March 21 through April 4 with post-hearing comments and briefs received through May 19.

(Ralph L. Harding, Jr., and representatives of 10 SPI member companies presented direct testimony at these hearings. In addition, more than a dozen written briefs, ranging from 50 to 100 pages in length, were submitted.)

**Editor's Note: This has not been substantiated by any human studies, but was arrived at on the basis of animal data.*

SPI news briefs

The Society of the Plastics Industry, Inc.

355 Lexington Avenue, New York, N.Y. 10017 (212) 573-9400

VOLUME 9 ISSUE IX OCTOBER 1978

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Mandates Safety Levels

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Optimistic Picture Presented for Plastics Industry in '78 Annual Report

Stanford H. Shaw, Immediate Past SPI Chairman, is optimistic about the plastics industry, based not only on past achievements, but also on future growth prospects. Commenting on the state of the industry in the SPI Annual Report for fiscal 1978, published in September, Mr. Shaw said: "Looking to the future, we have every reason to be projecting growth. In every market our processor members have new opportunities. New and improved resins and improved machinery are contributing to further expansion."

The Society's 1978 Annual Report includes full reviews of the activities of SPI's operating Units. Coverage of the Society's most visible and far-ranging activity, the Public Affairs Committee, includes these areas: legislative/regulatory, technical, combustibility, occupational safety and health, toxicity, resource recovery and material conservation, informational programs, and Washington activities.

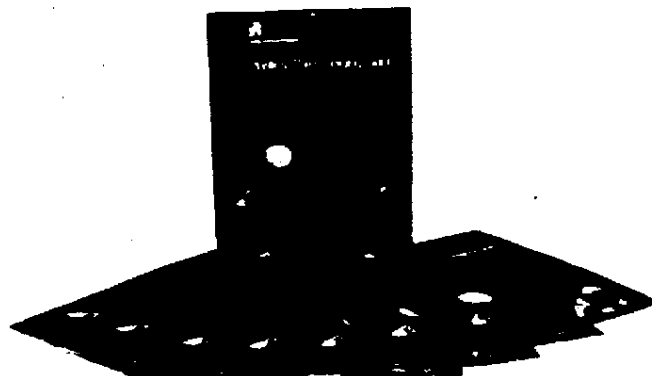
"Although less publicized, the regular or traditional programs of

the Society's various operating Units showed considerable progress," according to Mr. Shaw. "Reflecting both favorable business conditions and stronger interest, attendance at many of our meetings was up substantially."

The Annual Report also includes a preview of NPE/79, and a complete financial statement.

Closing out his two-year term as Chairman, Mr. Shaw, president of Shaw Plastics Corp., said that plastics have some special negative image problems in the areas of combustibility, energy, product liability, environment and toxicity which, under other circumstances, might dampen our optimism. "However, there is not only potential and momentum, there is recognition that plastics will become more and more the essential materials of our economy," he added.

In concluding his remarks in the "Chairman's Letter," Mr. Shaw turned the Chairmanship over to Iver Freeman, noting that, "In addition to being in good shape, your Society is in good hands."



1978 Annual Report reflects growth of plastics industry.

SPI Condemns Government Cancer Report as 'Embarrassment to Medical Science'

The estimate released by Health, Education, and Welfare Secretary Joseph A. Califano on September 11 of excess deaths in the United States from occupational exposure to vinyl chloride is "ludicrous to the point of absurdity," said SPI President Ralph L. Harding, Jr. Mr. Harding spoke following the Secretary's statement quoted from an unpublished study before the AFL-CIO National Conference on Occupational Safety and Health.

"If the vinyl chloride estimates

are any indication of the accuracy of the rest of the report, the document must stand convicted as an embarrassment to medical science and to the government agencies that produced it," Mr. Harding said.

He called upon "responsible scientific bodies such as the World Health Organization and the American Cancer Society...to stand up and condemn this document for the travesty that it is."

The report prepared for HEW by the National Cancer Institute and

the National Institute of Environmental Health Sciences purports to show that at least 20 percent of the cancer deaths in the United States each year are due to occupational factors.

Vinyl chloride was cited in the study as being responsible for 1,940 excess cancer deaths each year. Contrary to the report, only angiosarcoma of the liver has definitely been linked with exposure to vinyl chloride. The federal Center for Disease Control (CDC) has confirmed a total of only 23 such cases in the last 16 years in the United States.

"Based on the CDC tabulation," Mr. Harding said, "past heavy exposure to vinyl chloride has been responsible for these 23 deaths in 16 years, not the 2,000 per year quoted in the report, and even this actual low rate will decline as a result of the extensive engineering controls installed by the industry over the past few years."

AIHC Denounces Study

Ronald A. Lang, Executive Director of the American Industrial Health Council, also denounced the study, criticizing the HEW Secretary's premature release of the draft summary. "The summary Mr. Califano refers to tells us nothing. All we have are some arbitrary risk ratios multiplied by some equally arbitrary exposure levels," Mr. Lang said.

Industry's figures of from one to five percent of human cancer incidence being attributable to occupational exposure are broadly accepted by government and industry as well as by the scientific community," Mr. Lang said. "If there is new data, it should be published and critiqued by these groups before HEW alarms the public unnecessarily."

The AIHC director said that Mr. Califano's statement "spotlights the need for a uniform national cancer policy...and the creation of an independent scientific panel to identify potential carcinogens and assess their potency."

CCCS Annual Conference to Reflect New Directions on Consumer Safety

A preliminary program for the Eighth Annual Conference of the SPI Coordinating Committee on Consumer Safety, scheduled for March 28-29, 1979 at the Shamrock Hilton, Houston, was announced by SPI's CCCS Chairman Dan Kent, B.F. Goodrich Chemical Co.

The theme of the Conference is "Getting Results—What's Been Done and What's Being Done to Save Lives and Property."

The two-day meeting will open with a general session on safety, including discussions on "Product Liability: Case Studies and Lessons," "Product Design for Safety," and "What are Fire Loss Statistics Telling Us?"

There will also be Technical, Transportation, Furnishings/Appliances, and Construction sessions. Speeches pertaining to these areas are planned to include the following topics: "Status of Fire Toxicity Testing," "Toxic Gases in Real Fires," "The Role of Plastics in Transportation Safety," "Lessons from Full Size Room Burn Tests," "Life Safety Problems in Buildings," and "A Review of SPI/Plastics in Construction Council Fire Safety Programs."

In announcing the preliminary program, Mr. Kent stated that the Committee has expanded its

scope to include broader activity in all areas of consumer safety as well as continuing emphasis on combustibility issues. "In the past, our efforts were directed toward supporting fire research programs as well as responding to critical issues already existent, such as Federal Trade Commission action and concerns raised by code bodies," Mr. Kent said.

While the Committee will continue to respond to these issues, "The situation is now under some degree of control," Mr. Kent said. "In addition to supporting programs toward developing safer materials, we're now putting increased emphasis on a systems approach—development of alternative programs such as suppression and detection devices and educational and public relations programs."

Michael Roby, Rubbermaid, Inc., Chairman of the Eighth Annual Conference, pointed out that this year's meeting reflects the Committee's new direction toward consumer safety. In the past the Conference had been called the Combustibility Symposium.

The Conference program committee is currently lining up speakers. For more information, contact Jerry Carroll, Safety Director, SPI/ New York.

Workshops Announced for Financial Manual Volume III

A series of two-day workshops has been announced to introduce Volume III of the *Financial Management Manual for Plastics Processors*, which covers "Planning."

The major topics covered in Volume III include a Profit Planning and Budgeting Overview, Gathering Data for Profit Planning and Budgeting, Establishing Profit Goals and Sales Forecasts, Developing the Profit Plan/Budget Detail, and Flexible Budgeting.

The volume also contains sections on Zero-Base Budgeting, Capital Investment Planning, a Cash Management Overview, Developing Cash Forecasts, and Managing Cash Flows Effectively.

Six workshops have been scheduled as follows: November 1-2, 1978, Holiday Inn Convention Center, Cleveland (near airport); November 16-17, Hyatt Regency O'Hare, Chicago (O'Hare Airport); December 6-7, Hyatt Regency Cambridge, Cambridge, Mass.; January 10-11, 1979, Del Webb's Newporter Inn, Newport Beach, Calif.; January 23-24, The Key Biscayne Hotel and Villas, Key Biscayne, Miami, and February 7-8, Houston Oaks Hotel, Houston.

The registration fees for each workshop to SPI members are \$195 for the first person and \$170 for each additional attendee from the same company. The fees for nonmembers are \$245 for the first person and \$220 for each additional attendee from the same company. Checks should be made payable to SPI and sent to Al Evans, SPI/New York.

The *Financial Management Manual for Plastics Processors* has been coordinated and edited by Ernst & Ernst under the guidance of SPI's Financial Management Committee. Volumes I and II cover, respectively, Manufacturing Cost Control and Cost Estimating and Pricing. The fourth volume, to be published in 1979, will be on Materials Management.

PIA Sponsors Graduate Fall Courses

The Plastics Institute of America has announced several graduate courses offered in the fall of 1978.

A five-day executive course on "Technology and Business in the Plastics Industry" is scheduled for October 30 to November 3 at Airlie House, Warrenton, Va. The theme will be the development of interrelationships between technological problems and the business of making a profit, treated in a conference/workshop format.

Featured speakers will include Joel Frados, publisher of *Plastics Focus*, on growth predictions for the plastics industry in the 1980s; Dr. William J. Burlant, executive engineer, Ford Motor Co., on "New Markets and Plastics Technology in Transportation"; SPI President Ralph L. Harding, Jr., on the "Relationship of Technical Societies to the Industry"; and Richard Titus, SPI's manager of Federal Government Affairs, on

"Effects of Government Regulations on the Plastics Industry."

On November 7 to 10, "Rheology of Polymers; Its Relationship to Processing and Properties" will be held at Northwestern University, Evanston, Ill.

"Introduction to Polymer Science and Technology" will be offered on November 13 to 14 in Houston and on December 4 to 5 at Stevens Institute of Technology, Hoboken, N.J.

A course on "Thermoplastic Elastomers" is scheduled for November 15 to 17 at the University of Southern California, Los Angeles. Molecular structure and properties, special processing characteristics, and unique engineering use will be covered.

For more information, contact the Plastics Institute of America, Inc. at Stevens Institute of Technology, Castle Point Station, Hoboken, N.J. 07030.

Moldmakers Division Publishes Labor Survey

The first labor survey of plastics moldmaking companies, conducted under the auspices of SPI's Moldmakers Division, has been completed. Information submitted by 333 moldmaking shops in the United States and Canada is summarized in the Division's newly published "1978 Labor Survey of Plastics Moldmaking Companies."

The report is arranged geographically and by job classification, providing typical salary ranges for beginning to advanced moldmaking shop positions. Fringe benefit policies are reported as well as average work week and average size shop.

The survey is available from Moldmakers Division headquarters, SPI, 3150 Des Plaines Ave., Des Plaines, Ill. 60018. The cost is \$10 to SPI member companies and \$25 to nonmembers.

The Division plans to conduct similar surveys on a regular basis to monitor changes in wages and/or benefits in the industry.

Annual Labor Survey Under Way

SPI's Financial Management Committee advises that the questionnaires for the Fortieth Annual Labor Survey for Plastics Processors were mailed to SPI voting representatives of plastics processing firms on September 15, 1978 and the due date for completed questionnaires was extended to October 27.

As in the past, the survey measures hourly rates of pay for some 50 positions in the plastics processing industry. The effective date of the survey is September 30, 1978. The survey also attempts to determine what the practices of the plastics processing industry are in regard to fringe benefits, paid holidays, bonus plans, shift premiums, and other forms of compensation.

Participants will automatically receive a copy of the final report. Nonparticipants will be able to purchase a copy at a price yet to be determined by the Committee.

For more information, contact Al Evans, Financial Management Committee, SPI/New York.

34th RP/C Conference to Examine Effects of Technological Advances on Market Areas

"Reinforcing the Future" is the theme of the 34th Annual Conference of the Reinforced Plastics/Composites Institute, which will be held in New Orleans at the Marriott Hotel, on January 29 to February 2, 1979. This is the first time in years the Conference has been held outside Washington, D.C.

In keeping with the theme, emphasis throughout the five-day Conference will be on relating developments in processing, in the newer materials, and in advanced composites to more and broader market areas. The adaptation of aircraft and aerospace composites technology to automotive design and production and the use of graphite and aramid reinforcement and high-strength SMC in the marine market will be explored. Refinements in resin systems will also be reported.

Processing advances will be covered in depth, including automation of the SMC process, micro-computer-controlled filament winding, linear and nonlinear controls for thermoset processes, and practical and new applications of hot mold coating.

Engineering Course Offered

The Conference will also feature a one-day Design Engineering Seminar which was developed to familiarize designers, product engineers, and manufacturers who may be knowledgeable in one or two areas of reinforced plastics with the full scope of the industry and its widening range of materials, processes, and uses. The morning and afternoon seminar sessions are the only ones scheduled for opening day, Monday, January 29.

The morning session will give an introduction to the design of reinforced plastics. Two concurrent sessions will be held in the afternoon, one on Open Mold processing and the other on Closed Mold processing, where the specifics of reinforced plastics' many production methods will be considered in depth.

The Open Mold session will focus on the marine and building

and construction industries, and on corrosion-resistant products such as tanks and large pipe. The Closed Mold session will emphasize such current "in-the-news" systems as reinforced RIM, elastic reservoir molding, and injection molding of thermoset polyester BMC.

The cost of the Design Engineering Seminar is included in the conference registration fee, which is \$80 for SPI members and \$90 for nonmembers.

Automotive Day

Another highlight of the Conference will be largest automotive program in the Institute's long history. Louis R. Ross, executive vice president of Ford Motor Co.'s Diversified Products Operations, will be the featured Automotive Day speaker on Thursday, February 1. Three sessions and 21 papers will be devoted exclusively to the transportation industry to reflect the prominence of this market for RP/C, and other sessions, notably Advanced Composites, will present at least 10 additional automotive-oriented papers.

The Conference will also have unique Personal Contact Periods on Tuesday and Wednesday afternoons, when no regular sessions



*Louis R. Ross, Ford Motor Co.
Automotive Day Speaker*

are scheduled, to provide for direct contact among end users, designers, engineers, molders and fabricators, and materials and equipment manufacturers. Design Information Service Center (DISC) booths open throughout the five days offer further opportunity for person-to-person exchanges.

For details on registration, contact the RP/C Conference Administration, SPI/New York.

Fifth International Urethane Conference Announced

The Fifth International Urethane Conference, sponsored by SPI's Urethane Division and Fachverband Schaumkunststoffe E.V., Frankfurt, Germany, will be held in Strasbourg, France on June 9-13, 1980.

Endorsed by the Urethane Associations of Canada, England, France, and Japan, plus other industry groups around the world, the Conference will have technical, application, and marketing presentations on cellular and non-cellular urethane plastics worldwide.

Emphasis will be on the automotive, construction, and furniture industries.

The Conference Committee is now developing the program for this important international meeting, which is expected to attract about 1,000 industry, government, and university representatives from 30 countries.

For more information, contact Dr. Samuel Steingiser, Conference Chairman, SPI/New York, or Dr. F. K. Brochhagen, Conference Co-Chairman, Bayer AG, 5090 Leverkusen, Germany.

Processors' Safety Awards Presented

The winners of the 1977 SPI Safety Awards Program for Processors in the Plastics Industry have been announced. The awards, given to companies with an outstanding record of safety and health, fall into two categories: the Achievement Safety Award and Merit Safety Award. Winners are determined on the basis of an annual summary of Occupational Injuries and Illnesses reviewed by SPI's Committee on Occupational Safety and Health.

The Achievement Awards are given to member companies in recognition of the absence in an entire calendar year of lost work days due to illness, injuries, or deaths resulting from the work environment. The Merit Awards are given to those companies with a 1.5 percent or less frequency of such lost work day cases in the same calendar year.

The following companies earned the zero-frequency Achievement Safety Awards: Aero Plastics Inc.; Charter Supply Div., Consolidated Foods Corp.; Dick-

mont Plastics Corp.; Eimcomet Plastics, Enviratex Corp.; Ethyl Corp., Federal Tool & Plastics; Ethyl Corp., Films Div., Carbon-dale, Pa.; Ethyl Corp., Films Div., La Grange, Calif.; Excel Mold, Inc.; F & S Central; Fairway Molds, Inc.; G.P. Plastics; General Tire; Hooker Chemical; S.C. Johnson & Son; M & T Chemicals, Furane Plant; Master Containers; Mil Bar Plastic Inc.; Piers Plastic Molder Inc.; Plast-O-Meric, Inc.; Rakar Inc.; Resinite Dept., Borden, Inc., Compton, Calif.; Resinite Dept., Borden Inc., Griffin, Ga.; Resinite Dept., Borden, Inc., Illiopolis, Ill.; Sterling Plastics; Teetz & Baur Plastics; Tempo Plastic Co., and Vernon Plastics, Borden, Inc.

The following companies received the Merit Safety Awards: Cal-Mold Inc.; Citation Plastics Co.; Foam Molders & Specialties; General Tire, Lawrence, Mass.; General Tire, Odessa, Tex.; General Tire, Reading, Mass.; Highland Plastics, Inc.; Hooker Chemical Ruco Div., and Pro Brush Div., Vistron.

Literature Catalog Keeps Pace with New Publications

The 1978 SPI Literature Catalog, listing more than 200 article reprints, booklets, training manuals, statistical reports, speech materials, and other plastics industry literature, has been updated to include the latest SPI publications issued. The new catalog, which was mailed to the full SPI membership in August, will be periodically revised as additional SPI literature is published, and is offered free to members and non-members alike.

The 1978 list is organized alphabetically by subject, ranging from Building and Construction to Vinyl Dispersions. Classifications include Cellular Plastics/Urethane, Engineering, Environment, Food and Drug Packaging Materials, Molders, Plastics Pipe, and Statistics. An extensive list of Plastic Bottle Institute publications has been added.

Copies of the catalog may be obtained from the Publications Sales Department, SPI/New York.

SPI Members Assist in Planning College Plastics Program

Four SPI member company executives were appointed to serve on the Advisory Committee of the Central Connecticut State College School of Technology to assist in planning a plastics industry educational program directed at current personnel in the industry.

The Society members are working with five other industry executives and school administrators and faculty in designing the curriculum, which focuses on the technology of the plastics industry and is described as unprecedented in the northeastern United States.

The purpose of the program is to train middle management personnel for the plastics industry by providing background in machine tool design, tool and die processes, line supervision, safety regulations, marketing and sales, and other areas of particular concern

to industry managers.

The SPI members serving on the Advisory Committee are: John Harkness, general manager, Harvey Hubbell Inc.; Steven Meacham, technical service manager, Reichhold Chemicals Inc.; Theodore S. Stoughton, president, Curtis Plastics Co.; and Wesley M. Villo, director of training and safety, New Britain Plastics Machine.

The first course, which began in September with 32 registrants, is considered a huge success, and the Committee is currently planning future courses.

Industry managers and executives interested in the program, offered primarily in the evenings and on Saturdays, should write to Mr. Robert Crevier, coordinator of the program, at the School of Technology, Copernicus Hall, CCSC, New Britain, Conn. 06050.

Around the Industry

John J. Bachner, president of Chicago Molded Products Corp. for 21 years, has relinquished the presidency, but remains its chairman. On his recommendation, Henry Bachner was elected president by the board of directors.

John Bachner, an SPI voting representative, served on the Society's board of directors and was chairman of its committee on molding in 1953. Henry Bachner was previously vice president and secretary of Chicago Molded.

John K. Moffett, Jr., an SPI alternate voting representative, was named vice president and director of the chemicals and plastics business group of U.S. Industrial Chemicals Co., a division of National Distillers and Chemical Corp. The chemicals and plastics group is one of three business groups formed in a restructuring of the company.

Financial and Operating Ratios Survey Released

SPI's Financial Management Committee has announced the release of the results of the Fifteenth Annual Financial and Operating Ratios Survey of Plastics Processors covering the year 1977 or closest fiscal period.

This survey, conducted annually, reflects data on two bases: as a percent of total Assets and as a percent of Net Sales. This marks the first time that SPI survey results are shown this way. Accord-

ing to Leonard Golden of Colgate Plastics and Chairman of the Financial and Operating Ratios Subcommittee, "The data should be much more meaningful than in the past" and it should be "far easier to fill out the questionnaire."

One hundred fifty-two firms participated in this year's survey. The figures are shown separately for Custom and Proprietary Molders, Injection Molders, Reinforced Molders, and Extrusion Proces-

sors. The figures are shown for processors with sales of less than \$5 million and sales of \$5 million and more.

Copies of the 1977 Financial and Operating Ratios Survey (No. 16) are available at \$20 each to SPI members and \$40 to non-members. Orders with checks made payable to SPI should be sent to the Statistical Department, c/o the Financial Management Committee, SPI/New York.

U.S. PLASTICS RESINS PRODUCTION (millions of pounds)

RESIN TYPE	JULY			7 MONTHS TO DATE		
	1978	1977	PERCENT CHANGE	1978	1977	PERCENT CHANGE
Thermoset Resins	325	297	+ 9.4	2,458	2,272	+ 8.2
Thermoplastic Resins	2,268	2,096	+ 8.2	15,614	14,266	+ 9.5
TOTAL	2,593	2,393	+ 8.4	18,072	16,538	+ 9.3

Source: SPI Committee on Resin Statistics Monthly Statistical Report, as compiled by Ernst & Ernst.

U.S. PLASTICS RESINS SALES & CAPTIVE USE (millions of pounds)

RESIN TYPE	JULY			7 MONTHS TO DATE		
	1978	1977	PERCENT CHANGE	1978	1977	PERCENT CHANGE
Thermoset Resins	315	294	+ 7.1	2,388	2,223	+ 7.4
Thermoplastic Resins	2,062	1,940	+ 6.3	15,510	14,361	+ 8.0
TOTAL	2,377	2,234	+ 6.4	17,898	16,584	+ 7.9

Source: SPI Committee on Resin Statistics Monthly Statistical Report, as compiled by Ernst & Ernst.

U.S. PLASTICS PIPE, TUBE, CONDUIT, AND FITTINGS SHIPMENTS (millions of pounds)

APPLICATION	JUNE			6 MONTHS TO DATE		
	1978	1977	PERCENT CHANGE	1978	1977	PERCENT CHANGE
Pressure	107	107	0.0	514	494	+ 4.1
DWV (Drain, Waste, & Vent)	31	41	-24.3	167	193	-13.5
Conduit	33	24	+37.5	157	119	+32.0
Sewer & Drain	36	30	+20.0	151	128	+18.0
Other	12	11	+ 9.1	63	48	+31.3
TOTAL PIPE	219	213	+ 2.8	1,052	982	+ 7.1
TOTAL FITTINGS	18	18	0.0	90	81	+11.1

Source: Plastics Pipe Institute Monthly Statistical Report, as compiled by Ernst & Ernst.

Calendar of Events

Oct 18-21 Moldmakers Division Annual Conference. Sahara Tahoe, Stateline, Nev. Contact: SPI Moldmakers Division, 3150 Des Plaines Ave., Des Plaines, Ill. 60018. Tel.: 312-297-6150.

Oct 19-20 Insulation Committee, Plastics in Construction Council. Houston Oaks Hotel, Houston. Contact: Joe McDermott, SPI/New York. (Members only.)

Oct 24-25 Society of Plastics Engineers "PVC Performance in Various Environments" RETEC. Howard Johnson's Motor Hotel, Toronto. Contact: Douglas R. Winter, A. Schulman Canada Ltd., 240 Duncan Mills Rd., Don Mills, Ontario M3B 1Z4.

Oct 24-27 Urethane Division Technical Conference. Colony Square, Atlanta. Contact: Bert Montell, SPI/New York.

Oct 25-27 Board of Directors Meeting. The Ocean Reef Club, Key Largo, Fla. Contact: Christine Benton, SPI/New York.

Oct 31- Society of Plastics Engineers "Decorating Plastics—Savings, Processing, Environment" RETEC. Hyatt Regency Hotel, Dearborn, Mich. Contact: Alan H. Chapel, EPC Industries, 2084 Latimer Dr., Muskegon, Mich. 49441.

Nov 1-2 Reinforced Thermoset Press Molding Conference. Stouffer's Inn on the Square, Cleveland. Contact: Joe McDermott, SPI/New York.

Nov 3 Expanded Polystyrene Block General Membership Meeting on Federal Trade Commission Thermal Insulation Trade Rule. Hyatt Hilton Head, Hilton Head Island, S.C. Contact: SPI Midwest, 3150 Des Plaines Ave., Des Plaines, Ill. 60018. Tel.: 312-297-6150.

Nov 7-9 Reinforced Plastics Corrosion - Resistant

Structures Committee (Nov. 7), followed by Western Section Seminar on "Fight Corrosion with Fiber Glass Reinforced Plastics." Caesar's Palace, Las Vegas, Nev. Contact: Joe McDermott, SPI/New York for Committee meeting; Alton Drew, SPI West, Saddleback Square, Suite 124, 12440 Firestone Blvd., Norwalk, Calif. 90650 for Seminar.

Nov 9-10 Epoxy Resin Formulators Division Meeting. Dearborn Inn, Dearborn, Mich. Nov. 9: Technical/Regulatory Committee Meeting. Nov. 10: Division Meeting. Contact: Pat Toner, SPI/New York.

Nov 9-11 Plastic Bottle Institute Semi-Annual Meeting. Innisbrook Country Club, Tampa, Fla. Contact: John Malloy, SPI/New York.

Nov 13-15 Society of Plastics Engineers "Plastics in Packaging" and "Acrylonitrile" NATEC. Hyatt Regency O'Hare, Chicago. Contact: Eugene E. Wilson, SPE, 656 W. Putnam Ave., Greenwich, Conn. 06830.

Nov 14-16 Western Plastics Exposition. Anaheim Convention Center, Anaheim, Calif. Contact: Norry M. Hastings, Hastings Plastics Co., 1704 Colorado Ave., Santa Monica, Calif. 90404. Tel.: 213-870-6683.

Nov 28-29 Reinforced Plastics Panel Council. Royal Orleans, New Orleans. Contact: Joe McDermott, SPI/New York. (Members only.)

Nov 29-30 International Committee. Hyatt Regency Hotel, Washington, D.C. Contact: Al Evans, SPI/New York.

NBS Seeks Research Associates for Three Fire Programs

The U.S. National Bureau of Standards is seeking several research associates to work with NBS staff in three different areas of the fire program at its Center for Fire Research.

One area involves the study of the dynamics of room fires and the development of predictive models. The candidate for this compartment fire program should have some experience in the thermal and fluid sciences with a preferred background in engineering and a knowledge of computer programming. The term of the appointment should be preferably two years, but not less than one year. The associate should derive from the program the ability to conduct full-scale room fire tests, including a knowledge of temperature, velocity, and heat flux instrumentation.

Another research associate is needed to assist in the final development of a new flame spread method which NBS has been working on modifying and improving for more than a year. The pro-

gram supervisor suggested that the candidate best suited for this project, a combination of technical analysis and laboratory experiments, would be a recent college graduate mechanical or chemical engineer.

The third associate will work on a fundamental study of the mechanisms of ignition and pyrolysis of polymeric materials under thermal radiation. NBS would like to extend the present program to study the effects of the chemical structure of polymeric materials and of chemical additives on ignition and pyrolysis. The candidate should have a background in chemistry or chemical engineering and preferably a Ph.D. or equivalent experience in the research. The term of the appointment should be at least one year.

Interested parties should contact Dr. Lowell R. Perkins, Dupont Experimental Station, Building 353, Room 117, E.I. du Pont de Nemours, Wilmington, Del. 19898 (tel.: 302-772-3613) for more details.

William T. Cruise
77 River St.
Hoboken NJ 07030

FIRST CLASS MAIL



The Society of the Plastics Industry, Inc.
355 Lexington Avenue
New York, New York 10017

SPI Welcomes

SPI would like to welcome the following new members:

Altainer Co., 8640 E. Slauson Ave., Pico Rivera, Calif. 90660. Alta-Pak loose-fill dunnage.

Charles A. Breskin Associates, Inc., 6 Corporate Pk. Dr., White Plains, N.Y. 10604. Professional membership / Consulting corporation.

Enflo Corp., 315 Lake Ave., Bristol, Conn. 06010. Polytetrafluoroethylene.

Fisher Co., 498 N. Main St., Centerville, Utah 84014. Corrosion resistant polyesters, spray up and filament wound.

Foam Plastics of New England/Division of Lewis Construction Co., Rte. 69-New Haven Rd., PO Box 7075, Prospect, Conn. 06712. Molding and cutting of EPS for industrial and residential perimeter insulation and flotation.

GKN Windsor Limited, PO Box 19, Redditch, Worcs. B98 0TA, England. Plastics machinery.

Hunter Plastic Sales, Inc., 6520 Powers Ferry Rd., Suite 200, Atlanta, Ga. 30339. Custom processors.

ICC Industries, Inc., 720 Fifth Ave., New York, N.Y. 10019. PVC resins.

Inmont Corp., 3221 W. Big Beaver, Troy, Mich. 48064.

Marko Foam Products, Inc., 2500

W. 1100 South, Salt Lake City, Utah 84144. Expandable polystyrene foam, EPS.

Richard J. Marshall, 28314 Danvers Ct., Farmington Hills, Mich. 48018. Individual associate.

Pedro Calzada Pinto, Design Consultant Eng., Mar de Los Nectares #10, Fracc. Los Olivos, Mexico, D.F. 22. Individual professional.

Pollyfoam Inc., Providence Rd., Northbridge, Mass. 01534. Expanded polystyrene—custom molding.

Raven Industries, Inc., PO Box 1007, Sioux Falls, S. Dak. 57101. FRP tanks, custom molded FRP parts, polyethylene tanks.

G. Whitney Saidla, Whitney & Co., 11 Commonwealth Ave., Boston, Mass. 02116. Individual professional.

Robert W. Simoneau, Minuteman Reg. Vocational Technical School, 758 Marrett Rd., Lexington, Mass. 02173. Individual associate.

Southwest Insul Bead, Inc., 3524 Broadway, SE, Albuquerque, N. Mex. 87102. EPS block molder.

Sunbeam Plastics Corp., PO Box 4038, Evansville, Ind. 47711. Plastic caps.

Wonder Pak Corp., 15080 Goldenwest Circle, Westminster, Calif. 92683. Cushion Lok material for packaging.

Molders Guide Updated

A manual designed to identify and explain the commercial and administrative trade customs in the plastics molding industry, prepared by SPI's Molders Division, has been revised. Entitled "Standards and Practices of Plastics Molders and Plastics Molded Parts Buyers Guide," it contains the important points that purchasers have traditionally considered in specifying and purchasing molded plastics parts.

The manual includes sections highlighting areas of concern which manufacturers might encounter relative to contractual obligations, production and handling of tooling, production costs, packing and shipping, inspection practices, and claims for defects. In addition, there are sections that discuss inserts, component parts, and materials, and patents.

The guide also covers engineering and technical standards of plastics custom molders for the most commonly used plastics materials, and provides a glossary of terms.

The 1978 Molders Guide is available from Publications Sales, SPI/New York at \$5 per copy for SPI members and \$8 for non-members.