

MINUTES of the two-hundred eighty-fifth meeting of the Board of Directors of the Chemical Manufacturers Association, Inc., held at the Hyatt Regency on Capitol Hill, Washington, D. C., on Tuesday, November 3, 1981, at 1:30 p.m.

Directors:

Paul F. Oreffice, Chairman	
Louis Fernandez, Vice Chairman	
Richard C. Ashley	William B. Jackson
Dexter F. Baker	Raymond H. Marks
Robert P. Barnett	Dwight C. Minton
Charles E. Brookes	L. John Polite, Jr.
Harry W. Buchanan	William C. Roher
Carlyle G. Caldwell	Robert A. Roland
Lester E. Coleman	John P. Sachs
Orell T. Collins	George J. Sella, Jr.
Robert S. Dudley	William J. Simeral
Richard E. Engebrecht	Orin R. Smith
Robert W. Gerwig	Allan J. Tomlinson
Arthur L. Goeschell	Hugh B. Vanderbilt
James B. Henderson	Edward A. Von Doersten
Paul F. Hoffman	Konrad M. Weis
Edwin C. Holmer	William G. West
Richard J. Hughes	Louis G. Zachary
Ray R. Irani	

Secretary:

Bruce M. Barackman

General Counsel:

Edmund B. Frost

Treasurer:

Gary C. Herrman

By Invitation:

Jackson B. Browning, Union Carbide Corporation
 D. Christopher Cathcart, CMA
 Geraldine V. Cox, CMA
 John E. Dull, E. I. du Pont de Nemours & Company
 Myron T. Foveaux, CMA
 Robert B. Hill, CMA
 William C. Krumrei, The Procter & Gamble Company
 K. James O'Connor, Jr., CMA
 Victor H. Peterson, CMA
 Ernest S. Robson, SOCMA, Monsanto Company
 James N. Sites, CMA
 William M. Stover, CMA
 Glenn W. White, The Dow Chemical Company

1. The meeting was called to order by Chairman Oreffice.

2. APPROVAL OF SEPTEMBER 28-29, 1981 MINUTES

Minutes of the September 28-29, 1981 meeting, as distributed, were approved.

3. TREASURER'S REPORT

Mr. Herrman's report is attached as Exhibit A. Additionally he advised that the latest financial statements concerning the four months ending September 30, 1981,

Fluorocarbons

SPAC approved a limited advocacy role for the Fluorocarbons Program Panel so that the panel could make statements on science. The first was in response to the November 1979 NAS Report, "Stratospheric Ozone Depletion by Halocarbons: Chemistry and Transport."

SPAC recommended that the panel continue its limited advocacy charter and appointed two members to explore appropriate means of coordinating the Alliance, the CMA Fluorocarbons Panel and the CMA Section 4 Testing Task Force of the Chemical Regulations Advisory Committee.

Ketones

SPAC endorsed the panel's plans to establish an early dialogue with EPA regarding the anticipated TSCA Section 4(a) rule. However, SPAC recommended that the panel's charter be amended to include epidemiologic studies and possible evaluation of the environmental effects of ketone.

Phthalate Esters

In early 1980 the Phthalate Esters panel planned a material handling survey of the manufacturers, distributors and users of phthalates. However, since CMA is a trade association representing manufacturers, SPAC recommended that all action be tabled until the Society of the Plastics Industry could be contacted. In the meantime a study by the National Cancer Institute became available which for the first time raised health effects concerns for phthalate esters. In addition, based upon NCI's findings, EPA requested additional information on PMNs for phthalate esters. The panel was concerned that EPA had taken regulatory action on preliminary information and that EPA might come up with an unreasonable TSCA section 4(a) rule. SPAC recommended that the panel add advocacy to its charter and that they establish a dialogue with EPA on developing a voluntary test standard. This was a valuable recommendation as can be seen by the subsequent accomplishments of this panel (section 7.4 of the attachment).

Titanium Dioxide

SPAC recommended that in the absence of any significant findings in the long-term inhalation study in progress at duPont, the panel consider disbanding.

Vinyl Chloride

The Vinyl Chloride Panel hired an independent consultant to review the work performed by Industrial Bio-Test (IBT) under contract to CMA. This consultant recommended that CMA examine animal tissues still available from the study. The panel did not act upon this recommendation. However, they asked IBT for a refund of the \$130,000 they had already paid under the contract. The panel was waiting for financial resolution with IBT before submitting a final report to government agencies. SPAC recommended that the panel not wait for resolution before submitting a final report that act upon the consultants recommendation to do additional pathology. The Panel followed this recommendation.

8.10 Ethylene Dichloride (EDC)

The Ethylene Dichloride Program Panel was formed in February, 1975 to evaluate the adequacy of knowledge relating to EDC. The panel initiated a chronic inhalation, a metabolic, and a teratogenic study in experimental animals. The Panel decided to disband, pending the acceptance of all final reports on this research. This decision was reversed when it was learned that EPA was considering proposing a TSCA Section 8(a) rule.

8.11 Ethylene Oxide (EO)

A study conducted at Bushy-Run labs showed Ethylene Oxide to be carcinogenic in rats. Industry was interested in gathering information on the safe handling of Ethylene Oxide which led to the formation of the Ethylene Oxide Industry Council on July 30, 1981. The Council operates through an Executive Committee and four operating committees: Scientific, Regulatory, Finance and Membership, and Communications.

The Council is developing information regarding responsible industry programs to: 1) control exposure to ethylene oxide; 2) to develop relevant scientific, technological and economic data; and, 3) to cooperate with other national and international organizations having similar objectives. The Council will present this information and data to any United States federal, state or municipal governmental body considering regulatory controls on ethylene oxide so as to assure that such standards, regulations or policies, are reasonable, scientifically sound, and economically and socially effective.

The Council developed a response to the petition filed by the Public Citizen Health Research Group and the American Federation of State, County and Municipal Employees to lower the exposure standard for ethylene oxide. The petition asked that the eight hour TWA be lowered from 50 ppm to 1 ppm and that a short-term exposure level of 5 ppm be established. Representatives of the Council met with OSHA officials on September 2 to discuss industry's concern regarding the petition. On September 29 OSHA denied the petition.

8.12 Fluorocarbons (FC)

The Fluorocarbon Program was formally organized in the Spring of 1973 with essentially all of the Free World producers of chlorofluorocarbons (CFCs) supporting the effort. The panel's initial purpose was to determine the fate of CFCs in the atmosphere and the effects they may produce on plants or animals. There was no suspicion of their effect on the stratosphere.

With the publication of the Ozone Depletion Theory in June 1974 the Program was expanded and accelerated. To date, over \$10,000,000 has been spent on this research. There is no indication that the participants intend to curtail this effort in the immediate future.

eral agencies. The panel also reviewed a draft final report on a styrene pharmacokinetic study in mice. The latter study indicated species differences with respect to acute styrene toxicity in rats and mice. The panel presently is assessing how these differences relate to man before proceeding further with a research program.

The panel incorporated a Regulatory Task Group to address EPA's proposed regulations (NESHAP) for benzene emissions from ethyl benzene/styrene plants comments were submitted to EPA on June 1, 1981.

8.20 Titanium Dioxide (TD)

In 1977, Du Pont initiated a review of the literature on titanium dioxide toxicity and concluded that further information was needed to answer possible questions which might be directed at titanium dioxide. The impact of the Toxic Substances Control Act also raised concern as to the adequacy of existing information.

The panel has tentatively concluded that a historical mortality study is not justified at this time. The panel plans to terminate program activities if no new evidence of human health effects is reported as a result of the two year inhalation studies being conducted by Du Pont.

8.21 Trichloroethylene (TCE)

The Trichloroethylene Program Panel was formed on May 12, 1975 in response to an NCI Memorandum of Alert. The panel's primary concern was a long-term inhalation study. A contract was signed in 1975 with Industrial BIO-TEST Laboratories (IBT) to conduct such a study. The testing performed by IBT resulted in a number of grave inadequacies and a final report was not issued. Therefore, the CMA TCE Audit Task Group prepared an audit report. EPA's Cancer Assessment Group has asked the panel to provide validation of chamber concentrations for the first 12 to 15 months of the IBT study.

The panel is monitoring the progress of the NCI bioassay on TCE which involves several strains of mice and rats.

Although the panel contemplated an epidemiological study, SOCMA determined that a study population for an epidemiologic investigation would be too small to yield statistically significant results. Therefore, such a study was not conducted.

8.22 Vinyl Chloride (VC)

Since 1972, the Program Panel has supported activities related to the accumulation and assessment of health and safety data of vinyl chloride monomer.

After funding several animal studies, the emphasis on research shifted from toxicological investigations to the early diagnosis and clinical management of vinyl chloride-related injuries. The panel is also funding an update of a vinyl chloride epidemiology study of 10,000 workers.

The panel has maintained a close liaison with SPI and several European-based companies. The present interest in polyvinyl chloride (PVC) dust control limits in the UK is being closely followed. Several months ago OSHA requested information on PVC dust; however, no notice has been published or other action taken.

8.23 Vinylidene Chloride (VDC)

The Vinylidene Chloride Program Panel was formed in May 15, 1974 to investigate the potential toxicologic effects and pharmacokinetics of inhaled and ingested VDC in laboratory animals. Dow Chemical, which was planning research on VDC toxicology, agreed to convert its program into an industry-wide effort. The Two-Year Inhalation Toxicity and Oncogenicity Study of Vinylidene Chloride in Rats is still in progress.

The Work Practices Task Group of the panel prepared a Health and Safety Work Practices Guideline for Vinylidene Chloride to minimize exposure to VDC. The Guidelines were sent to the Director of NIOSH and the Project Manager for Criteria Documents at SRI. They received no other distribution.

The panel is preparing to respond to a Health Risk Assessment Criteria document on VDC under preparation by the EPA Criteria and Health Assessment Group. OSHA does not have a standard for VDC and EPA is unlikely to require any further toxicity testing on VDC under TSCA Section 4.

The pharmacokinetics and metabolism research show a species sensitivity of Mouse>Rat>Man. The total data bank indicates oncogenicity is not observed without recurrent tissue damage and without a cytotoxic dose; a tumorigenic response in man would be an improbable event.

8.24 Zinc Dialkyl Dithiophosphates (ZDDP)

The ZDDP Program Panel was chartered in November 1980 to conduct research on this class of oil additives. As a first step, gonadal toxicity studies of three ZDDP compounds were initiated in immature and mature rats and rabbits.

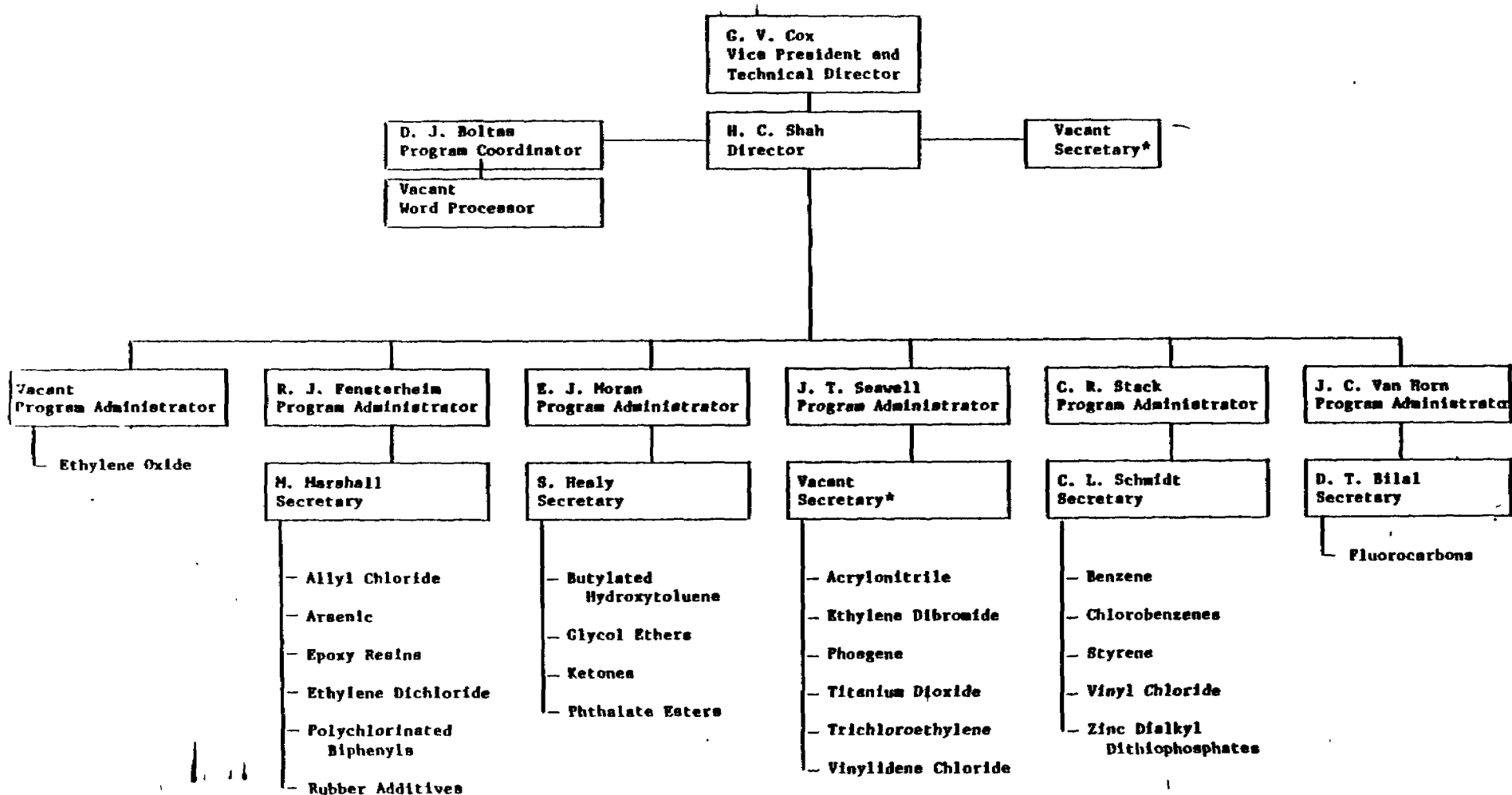
Obvious species differences were observed between rabbits and rats with respect to ZDDP toxicity. Consequently, the panel proposes to conduct a comparative in vivo pharmacokinetic study

TABLE 1

BIOMEDICAL AND ENVIRONMENTAL SPECIAL PROGRAMS BUDGET SUMMARY^a

<u>PROGRAM</u>	<u>RESEARCH AND ADVOCACY COMMITMENT</u>	<u>ADMINISTRATIVE EXPENSES</u>	<u>TOTAL</u>
Acrylonitrile	\$ 728,484	\$ 79,172	\$807,656
Allyl Chloride	309,500	17,186	326,686
Arsenic	10,000	8,600	18,600
Benzene	3,048,684	112,262	3,160,946
Butylated Hydroxytoluene	21,944	29,467	51,411
Chlorobenzenes	370,722	37,952	408,674
Epichlorohydrin	315,032	27,432	342,464
Epoxy Resins	- 0 -	15,059	15,059
Ethylene Dibromide	10,039	43,032	53,071
Ethylene Dichloride	288,100	64,449	352,549
Ethylene Oxide	- 0 -	15,518	15,518
Glycol Ethers	313,000	15,232	328,232
Ketones	208,880	28,977	237,857
Phosgene	217,512	85,728	303,240
Phthalate Esters	186,585	132,628	319,213
Polychlorinated Biphenyls	100,434	18,869	119,303
Rubber Additives	30,725	17,730	48,455
Styrene	708,218	66,545	774,763
Titanium Dioxide	30,725	23,969	54,694
Trichloroethylene	490,506	89,738	580,244
Vinyl Chloride	1,326,562	119,701	1,446,263
Vinylidene Chloride	729,482	57,440	786,922
Zinc Dialkyl Dithiophosphates	<u>79,857</u>	<u>12,207</u>	<u>92,064</u>
Subtotal	9,524,991	1,118,893	10,643,884
Fluorocarbons	9,216,650	569,753	9,786,403
<u>TOTAL</u>	<u>\$18,741,641</u>	<u>\$1,688,646</u>	<u>\$20,430,287</u>

^a Fluorocarbons program from start thru May 30, 1981. All other programs start to to September 25, 1981.



*shared

Figure 1 - Biomedical and Environmental Special Programs Division

LIST OF SPECIAL PROGRAMS

<u>NUMBER</u>	<u>PROGRAM NAME</u>	<u>PROGRAM TYPE</u>	<u>START DATE</u>	<u>COMPLETION DATE</u>
1.	Acrylonitrile	Research	06/20/74	
2.	Allyl Chloride	Research	08/19/75	
3.	Arsenic	Research and Advocacy	01/29/81	
4.	Benzene	Research and Advocacy	02/08/77	
5.	Butylated Hydroxytoluene (BHT)	Research and Advocacy	09/19/77	
6.	Chlorobenzenes	Research	12/16/74	
7.	Epichlorohydrin	Research	08/19/75	08/31/80
8.	Epoxy Resins	Research and Advocacy	01/18/77	
9.	Ethylene Dibromide	Research	03/22/79	
10.	Ethylene Dichloride	Research	12/17/74	
11.	Ethylene Oxide	Research and Advocacy	04/16/81	
12.	Fluorocarbons	Research and Advocacy	04/09/73	
13.	Glycol Ethers	Research and Advocacy	06/26/80	
14.	Ketones	Research and Advocacy	01/23/80	
15.	Phosgene	Research	05/18/72	
16.	Phthalate Esters	Research and Advocacy	02/24/72	
17.	Polychlorinated Biphenols	Advocacy	02/11/81	
18.	Rubber Additives	Research and Advocacy	09/10/79	
19.	Styrene	Research and Advocacy	10/24/74	
20.	Titanium Dioxide	Research	06/13/77	
21.	Trichloroethylene	Research	05/12/75	
22.	Vinyl Chloride	Research and Advocacy	11/16/71	
23.	Vinylidene Chloride	Research	05/15/74	
24.	Zinc Dialkyl Dithiophosphates	Research and Advocacy	10/02/80	

Appendix B

CMA 012634

COMPANIES PARTICIPATING IN SPECIAL PROGRAMS

ABBOTT LABS

Ethylene Oxide

AIR PRODUCTS

Vinyl Chloride

AKZO CHEMIE BV

Fluorocarbons

ALLIED CORPORATION

Fluorocarbons, Ketones, Phthalate Esters, Phosgene

AMAX LEAD & ZINC, INC.

Arsenic

AMERICAN CYANAMID

Acrylonitrile, Phthalate Esters, Rubber Additives

AMERICAN HOECHST

Styrene

AMOCO

Benzene, Styrene, Zinc Dialkyl Dithiophosphates

ANACONDA COPPER COMPANY

Arsenic

ARCO CHEMICAL

Benzene, Phthalate Esters, Polychlorinated Biphenyls

ARCO/POLYMERS

Styrene

ASAHI-DOW LIMITED

Vinylidene Chloride

ASAHI GLASS CO., LTD.

Fluorocarbons, Vinylidene Chloride

ASARCO INC.

Arsenic

ASHLAND CHEMICAL

Benzene

ASSOCIATED OCTEL COMPANY

Ethylene Dibromide

AUSTRALIAN FLUORINE CHEMICALS PARTY, LTD.

Fluorocarbons

BASF WYANADOTTE

Ethylene Dichloride, Ethylene Oxide, Phosgene, Phthalate Esters.

BECTON DICKINSON

Ethylene Oxide

BETHLEHEM STEEL

Benzene

BORDEN CHEMICAL

Ethylene Dichloride, Phthalate Esters, Vinyl Chloride

BORG-WARNER CHEMICALS

Acrylonitrile, Styrene

BRISTOL LABS

Ethylene Oxide

C-I-L, INC.

Trichloroethylene

CELANESE PLASTICS SPECIALTIES CO.

Epoxy Resins, Ethylene Oxide

CERTAIN-TEED

Vinyl Chloride

CHESEBROUGH PONDS

Ethylene Oxide

CHEVRON

Phthalate Esters, Zinc Dialkyl Dithiophosphates

CIBA-GEIGY

Epoxy Resins

CONOCO CHEMICALS

Ethylene Dichloride, Ethylene Oxide, Phthalate Esters, Vinyl Chloride

COSDEN OIL

Benzene, Styrene

CRESCENT MANUFACTURING CO

Ethylene Oxide

DAIKIN KOGYO CO. LTD.

Fluorocarbons

DART INDUSTRIES

Butylated Hydroxytoluene

DIAMOND SHAMROCK

Arsenic, Ethylene Dichloride, Polychlorinated Biphenyls, Phthalate Esters, Trichloroethylene, Vinyl Chloride

DOW CHEMICAL

Acrylonitrile, Allyl Chloride, Benzene, Chlorobenzenes, Epoxy Resins, Ethylene Dibromide, Ethylene Dichloride, Ethylene Oxide, Glycol Ethers, Ketones, Styrene, Trichloroethylene, Vinyl Chloride, Vinylidene Chloride

E. I. DU PONT DE NEMOURS & CO.

Acrylonitrile, Benzene, Ethylene Dichloride, Fluorocarbons, Phosgene, Phthalate Esters, Polychlorinated Biphenyls, Titanium Dioxide, Vinylidene Chloride

DU PONT CANADA INC.

Fluorocarbons

ELCO CORPORATION

Zinc Dialkyl Dithiophosphates

EL PASO PRODUCTS COMPANY

Styrene

EASTMAN KODAK

Polychlorinated Biphenyls

ESSEX CHEMICAL (RACON)

Fluorocarbons

ETHYL CORPORATION

Allyl Chloride, Ethylene Dibromide, Ethylene Dichloride, Phthalate Esters, Trichloroethylene, Vinyl Chloride, Zinc Dialkyl Dithiophosphates

EXXON

Benzene, Ketones, Polychlorinated Biphenyls, Phthalate Esters, Vinyl Chloride, Zinc Dialkyl Dithiophosphates

FOXMATIC CORP

Ethylene Oxide

GENERAL ELECTRIC

Phosgene, Phthalate Esters, Polychlorinated Biphenyls

GENERAL TIRE & RUBBER

Phthalate Esters, Vinyl Chloride

BFGOODRICH

Allyl Chloride, Ethylene Dichloride, Rubber Additives, Vinyl Chloride, Vinylidene Chloride

GOODYEAR TIRE & RUBBER

Rubber Additives, Vinyl Chloride

W. R. GRACE

Vinyl Chloride, Vinylidene Chloride

GREAT AMERICAN CHEMICAL

Vinyl Chloride

GREAT LAKES

Ethylene Dibromide

GULF CHEMICAL CO.

Acrylonitrile, Benzene, Ethylene Dichloride, Styrene, Vinyl Chloride

GULF & WESTERN

Titanium Dioxide

HALCON

Ethylene Oxide

HOECHST AG/AMERICAN HOECHST

Fluorocarbons

HOOKER CHEMICAL

Polychlorinated Biphenyls, Trichloroethylene, Vinyl Chloride

ICI AMERICAS

Ethylene Dichloride, Glycol Ethers, Vinyl Chloride

IMPERIAL CHEMICAL INDUSTRIES PLC

Fluorocarbons, Trichloroethylene

INMONT CORPORATION

Phthalate Esters

ISC CHEMICALS LTD

Fluorocarbons

JAPAN FLON GAS ASSOC.

Fluorocarbons

JOHNSON & JOHNSON

Ethylene Oxide

KAISER ALUMINUM AND CHEMICAL CORP
Fluorocarbons, Polychlorinated Biphenyls

KALI CHEMIE AG
Fluorocarbons

KENDALL CO
Ethylene Oxide

KEYSOR-CENTURY
Vinyl Chloride

KOPPERS COMPANY
Arsenic, Benzene, Butylated Hydroxytoluene, Phthalate Esters

KUREHA CHEMICAL INDUSTRY
Vinylidene Chloride

LUBRIZOL
Zinc Dialkyl Dithiophosphates

MALLINCKRODT INC
Ethylene Oxide

MICRO BIOTROL
Ethylene Oxide

MITSUI FLUOROCEMICALS LTD
Fluorocarbons

MOBAY CHEMICAL
Phosgene, Rubber Additives

MOBIL OIL CORPORATION
Benzene, Phthalate Esters

MONSANTO COMPANY
Acrylonitrile, Benzene, Chlorobenzenes, Ketones, Polychlorinated Biphenyls, Phthalate Esters, Rubber Additives, Styrene, Vinyl Chloride, Vinylidene Chloride

MONTEDISON SPA
Fluorocarbons, Phosgene

MONTROSE CHEMICAL CORP OF CA
Chlorobenzenes

MORTON CHEMICAL
Vinylidene Chloride

NALCO CHEMICAL COMPANY
Ethylene Oxide

C-6

NL INDUSTRIES
Titanium Dioxide

OLIN CORPORATION
Glycol Ethers, Polychlorinated Biphenyls, Phosgene, Vinylidene Chloride

OSMOSE WOOD PRESERVING COMPANY
Arsenic

PANTASOTE
Phthalate Esters

PENNWALT
Arsenic, Fluorocarbons, Rubber Additives

PHILLIPS PETROLEUM COMPANY
Benzene

PPG INDUSTRIES
Chlorobenzenes, Ethylene Dibromide, Ethylene Dichloride, Ethylene Oxide, Glycol Ethers, Polychlorinated Biphenyls, Phosgene, Trichloroethylene, Vinyl Chloride, Vinylidene Chloride

POLYSAR LIMITED
Benzene

PRODUITS CHIMIQUES UGINE KUHLMANN
Fluorocarbons

REICHHOLD CHEMICALS
Epoxy Resins

ROHM & HAAS
Vinylidene Dichloride

RUBICON
Phosgene

SALSBURY LABS
Arsenic

SCM CORPORATION
Titanium Dioxide

SHELL CHEMICAL COMPANY
Allyl Chloride, Benzene, Butylated Hydroxytoluene, Epoxy Resins, Ethylene Dichloride, Ethylene Oxide, Glycol Ethers, Ketones, Phthalate Esters, Vinyl Chloride, Styrene, Zinc Dialkyl Dithiophosphates,

SHERWIN WILLIAMS
Butylated Hydroxytoluene

CMA 012640

SHERWOOD MEDICAL
Ethylene Oxide

SHOWA DENKO KK
Fluorocarbons

STANDARD CHLORINE CHEMICAL CO
Chlorobenzenes

STANDARD OIL (OHIO)
Acrylonitrile, Benzene

STANGE COMPANY
Ethylene Oxide

STAUFFER CHEMICAL
Ethylene Dichloride, Phosgene, Phthalate Esters, Polychlorinated
Biphenyls, Vinyl Chloride

STEPEN CHEMICAL
Phthalate Esters

SUN PETROLEUM PRODUCTS
Styrene

SUNSHINE MINING CO
Arsenic

TECKNOR-APEX
Phthalate Esters

TENNESSEE EASTMAN
Acrylonitrile, Glycol Ethers, Ketones, Phthalate Esters, Vinylidene
Chloride

TENNECO CHEMICALS
Vinyl Chloride

TEXACO INC
Benzene, Ethylene Oxide, Glycol Ethers, Zinc Dialkyl Dithiophos-
phates,

TIOXIDE CANADA, LTD
Titanium Dioxide

TOMS RIVER
Phosgene

TRAVENOL LABS
Ethylene Oxide

UNION CARBIDE
Benzene, Ethylene Dichloride, Ethylene Oxide, Glycol Ethers, Ketones,
Polychlorinated Biphenyls, Phosgene, Phthalate Esters, Styrene, Vinyl
Chloride

UNION OIL OF CA
Vinylidene Chloride

UNIROYAL, INC.
Acrylonitrile, Butylated Hydroxytoluene, Rubber Additives, Vinyl Chloride

USS CHEMICALS
Benzene, Phthalate Esters, Styrene

UPJOHN COMPANY
Phosgene

VULCAN MATERIALS
Ethylene Dichloride, Polychlorinated Biphenyls

WITCO CHEMICALS
Phthalate Esters

WARREN CHEMICAL CO
Ethylene Oxide

9/25/81

CMA 012642

Butylated Hydroxytoluene (BHT)

The joint FAO/WHO Expert Committee on Food Additives recently extended the temporary average daily intake (ADI) for BHT, pending receipt of additional testing data.

Chlorobenzenes

EPA and the chlorobenzenes producers have agreed on a decision-tree approach to the testing of chlorobenzenes in the voluntary industry test program. The Toxicology Research Group has recommended that Dr. Gary Williams of the American Health Foundation perform the cell transformation assays and EPA is in agreement with this recommendation. Requests for proposals to conduct a two-generation reproduction study on monochlorobenzene were sent to five contract laboratories.

Ethylene Dibromide (EDB)

The International Brotherhood of Teamsters urged in a September 2, 1981, petition that the Occupational Safety and Health Administration (OSHA) issue an emergency temporary standard (ETS) reducing the exposure limit for the fumigant EDB. The Teamsters' petition claims that "three major studies" show EDB to be a potent carcinogen at levels far below those allowed under the present OSHA standard. OSHA has been asked to write an ETS. OSHA has no definitive plan of action until it has obtained more data. Information from the panel will be considered. Dr. L. Vernon White of Great Lakes Chemical and Mr. Roger Mangham of Ethyl Corporation will attend an OSHA meeting on EDB on October 13 as industry representatives.

Ethylene Dichloride

The Ethylene Dichloride Program Panel is endeavoring to clarify several questions relating to the final report of the chronic inhalation study conducted for the panel by Drs. Maltoni and Spreafico.

Ethylene Oxide

Membership of the newly formed Ethylene Oxide Industry Council includes 28 companies and associations. The Scientific and Regulatory Committees have formed several task forces that are in the process of developing programs. Budgets and proposals are to be submitted to the EOIC Executive Committee by November 1.

On September 28, OSHA denied a petition of the the Public Citizen Health Research Group and the American Federation of State, County and Municipal Employees to issue an emergency temporary standard. Also OSHA stated that an advance notice of proposed rulemaking (ANPR) would be issued. Included in the

At present, Panel participants include: The Dow Chemical Company, Great Lakes Chemical Company, PPG Industries, E.I. du Pont de Nemours & Co., Inc. and Ethyl Corporation.

Ethylene Dichloride

The Ethylene Dichloride Panel is reviewing a response from Montedison concerning several previously unanswered questions regarding the final report by Professor Maltoni.

Ethylene Oxide (EO)

The Ethylene Oxide Industry Council (EOIC) met in early December to review and approve the budget and proposed program for 1982. Activities of the EOIC are expected to include:

- Response to an anticipated OSHA Advance Notice of Proposed Rulemaking;
- Interaction with EPA concerning a Toxic Substances Control Act Section 4(a) test rule on EO;
- A human health risk assessment of exposure to EO;
- An economic regulatory impact study;
- Development of an industrial hygiene survey to assess workplace practices;
- A scientific program that will include a pharmacokinetic study, reproduction study or epidemiology study;
- Equivalency testing of monitoring methods and analysis used for measuring EO in the workplace;
- Development of a training program for EO workers; and
- Sponsorship of a cytogenetics workshop.

Fluorocarbons

Dr. Donald R. Strobach of Du Pont addressed the Technical Breakfast on December 10, 1981.

The Fluorocarbon Program Panel (FPP) is making rapid progress toward jointly funding approximately \$500,000 of