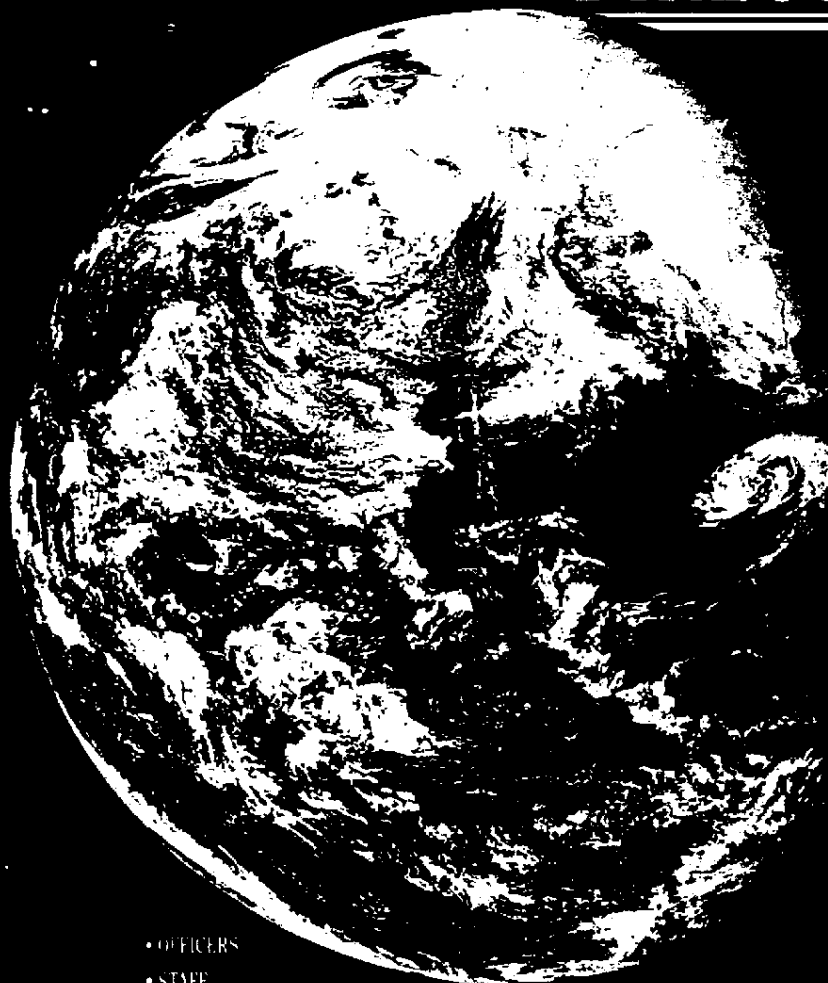


CHEMICAL MANUFACTURERS ASSOCIATION

1990-1991 DIRECTORY



- OFFICERS
- STAFF
- BOARD OF DIRECTORS
- COMMITTEES
- MEMBERS
- RESPONSIBLE CARE
- GENERAL PRINCIPLES
- RULES OF PROCEDURE
- ANTITRUST GUIDE
- CMA & ADVOCACY

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CHEMICAL MANUFACTURERS ASSOCIATION

The Chemical Manufacturers Association represents the chemical industry in North America. Founded in 1872, CMA is the oldest trade association in the Western Hemisphere.

CMA's approximately 180 member companies represent more than 90 percent of the productive capacity of basic industrial chemicals within the United States. The Association brings together member company experts to help resolve industry-wide public policy, technical and scientific problems. It communicates with government and the public on vital issues and administers research, studies and tests on a wide range of chemical products and practices.

PURPOSE

As set forth under Article II of the Bylaws, the purpose of the Association shall be the promotion of the inter-

ests of the chemical industry of the United States of America and Canada.

OBJECTIVES

The Board of Directors has stated the objectives of the Association as follows:

- 1. To provide leadership to its members, and to represent them in presenting industry interests, views, and recommendations to the legislative and executive branches of the federal government and to the regulatory agencies (and to state and local governments when appropriate) on those matters which affect the industry's health, vigor, and well being.
- 2. To aid in developing and maintaining a clear understanding by the public of the chemical industry and its contributions to the public welfare and to the advancement of our national, state, and local economies; and by appropriate, timely, and effective means to make known the contributions, accomplishments, and changing needs of the industry to the public broadly, and particularly to those initiators of thought and action outside the industry whose opinions, decisions, and actions affect the industry.
- 3. To provide leadership and guidance and to undertake programs to improve the chemical industry's service to the public by developing and promoting safe and clean practices in the manufacture, transportation, handling, and use of chemicals and chemical products.
- 4. To conduct or sponsor legitimate activities designed to achieve worthwhile benefit or savings to the Association members where individual company efforts cannot effectively accomplish the desired result.

RESPONSIBLE CARE

A Public Commitment

Public concerns about the impact of chemicals and hazardous wastes on human health and the environment continue to grow. Those concerns, whether real or perceived, have a direct impact on the chemical industry. Recognizing this, CMA's Board of Directors approved an initiative called "Responsible Care: A Public Commitment" in September 1988.

The goal of Responsible Care is to continuously improve the chemical industry's performance in environmental, health and safety quality through the commitment and joint efforts of its individual member companies and of the Association. The initiative is designed to be responsive to public concerns.

On October 30, 1988, CMA's membership adopted a Bylaw change making participation in Responsible Care an obligation of CMA membership.

The Responsible Care initiative has six program elements:

1) Guiding Principles

A statement of the philosophy and commitment by each member company regarding environmental, health and safety responsibilities in the management of chemicals.

2) Codes of Management Practices

Management goals which members are to make continuous good faith efforts to attain.

3) A Public Advisory Panel

A cross-section of environmental, health and safety thought leaders to assist the industry in identifying and developing programs and actions that are responsive and are viewed as being responsive to public concerns.

4) Member Self-Evaluations

Reports, measurements and other demonstrations of program implementation and progress toward improved environmental, health and safety performance in the responsible management of chemicals.

5) Executive Leadership Groups

Periodic regional meetings of executive contacts to review Codes of Management Practices under development, discuss members' progress on existing codes and identify areas where assistance from the Association or other companies is needed.

6) Obligation of Membership

Bylaw obligation of member companies to ascribe to the Guiding Principles, participate in the development of the codes and programs, make good-faith efforts to implement the program elements of the Responsible Care initiative, and use the Responsible Care name and logo according to the Association's guidelines.

GUIDING PRINCIPLES for RESPONSIBLE CARE

As a member of the Chemical Manufacturers Association, this company is committed to support a continuing effort to improve the industry's responsible management of chemicals. We pledge to manage our business according to these principles:

1. To recognize and respond to community concerns about chemicals and our operations.
2. To develop and produce chemicals that can be manufactured, transported, used and disposed of safely.
3. To make health, safety and environmental considerations a priority in our planning for all existing and new products and processes.
4. To report promptly to officials, employees, customers and the public, information on chemical-related health or environmental hazards and to recommend protective measures.
5. To counsel customers on the safe use, transportation and disposal of chemical products.
6. To operate our plants and facilities in a manner that protects the environment and the health and safety of our employees and the public.
7. To extend knowledge by conducting or supporting research on the health, safety and environmental effects of our products, processes and waste materials.
8. To work with others to resolve problems created by past handling and disposal of hazardous substances.
9. To participate with government and others in creating responsible laws, regulations and standards to safeguard the community, workplace and environment.
10. To promote the principles and practices of Responsible Care by sharing experiences and offering assistance to others who produce, handle, use, transport or dispose of chemicals.



OFFICERS

*CHAIRMAN OF THE BOARD

H. EUGENE McBRAYER
Exxon Chemical Company, 9 Old Kings Highway
South, Darien, CT 06820-4575

*VICE CHAIRMAN OF THE BOARD

FRANK P. POPOFF
The Dow Chemical Company,
2030 Willard H. Dow Center,
Midland, MI 48674

*CHAIRMAN OF THE EXECUTIVE COMMITTEE

JOHN W. JOHNSTONE, JR.
Olin Corporation, P.O. Box 1355,
Stamford, CT 06904-1355

*PRESIDENT

ROBERT A. ROLAND
887-1106

VICE PRESIDENT — TECHNICAL DIRECTOR

GERALDINE V. COX
887-1260

VICE PRESIDENT — TREASURER

GARY C. HERRMAN
887-1230

VICE PRESIDENT — COMMUNICATIONS

JON HOLTZMAN
887-1200

VICE PRESIDENT — STATE AFFAIRS

JAMES D. McINTIRE
887-1330

VICE PRESIDENT —

FEDERAL GOVERNMENT RELATIONS

WILLIAM M. STOVER
887-1122

VICE PRESIDENT — SECRETARY

CHARLES W. VAN VLACK
887-1108

VICE PRESIDENT — GENERAL COUNSEL

DAVID F. ZOLL
887-1350

**Directors and Board Committee Members ex officio*



STAFF

DIRECTOR

R

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OUNSEL

TECHNICAL DEPARTMENT

Vice President — Technical Department
(CHEMSTAR, NCRIC AND ENVIRONMENTAL GROUP)
GERALDINE V. COX — 887-1260

Director, National Chemical Response and
Information Center
HENRY J. SAUER — 887-1254

Manager, Chemical Referral Center
FRANCES G. BIASE — 887-1318

Manager, CHEMTREC/CHEMNET
MICHAEL L. DONAHUE — 887-1188

Manager, CHEMTREC Systems
R. JAY CHEZEM — 887-1257

Supervisor, CHEMTREC Operations
HOWARD E. MANNING — 887-1267

Director, Environmental Programs
JOE J. MAYHEW — 887-1164

Associate Director, Air Programs
RICHARD G. SIGMAN — 887-1313

Manager, Air Programs
KAREN K. FIDLER — 887-1176

Manager, Air Programs
MARK L. WARNER — 887-1383

Associate Director, Solid Waste Programs
DOROTHY A. KELLOGG — 887-1178

Manager, Solid Waste Programs
CYNDY J. BRYCK — 887-1290

Manager, Solid Waste Programs
JAMES C. MULLIGAN — 887-1270

Associate Director, Water and Groundwater Programs
BRENDA A. CUCCHERINI — 887-1174

Associate Director, Waste and Release Reduction
ANN M. MASON — 887-1180

Manager, Waste and Release Reduction
SUZANNE C. WILLS — 887-1366

Deputy Technical Director, Chemical Self-Funded Technical
Advocacy and Research Division Director
LANGLEY A. SPURLOCK — 887-1187

Senior Panel Manager
ELIZABETH FESTA GORMLEY —
887-1194

Associate Director
ROBERT R. ROMANO — 887-1198

TECHNICAL — continued

Associate Director
CAROL R. STACK — 887-1196

Senior Panel Manager
BARBARA O. FRANCIS — 887-1314

Associate Director
HASMUKH C. SHAH — 887-1192

Senior Panel Manager
JONATHON T. BUSCH — 887-1189

Senior Panel Manager
SUSAN R. HOWE — 887-1293

Associate Director
ELIZABETH J. MORAN — 887-1182

Panel Manager
MARIAN K. STANLEY — 887-1207

Assistant Vice President — Technical Department
(HEALTH, SAFETY, DISTRIBUTION, ENGINEERING AND PLANT
OPERATIONS GROUP)
GORDON D. STRICKLAND — 887-1388

Director, Health Programs
KATHRYN A. ROSICA — 887-1282

Manager, Health Programs
LESLIE J. KING — 887-1323

Associate Director, Health Programs
CLAUDETTE M. COFTA — 887-1278

Manager, Health Programs
EMILY M. CURRIE — 887-1292

Manager, Health Programs
DIANE S. LAYNE — 887-1365

Associate Director, Health Programs
SANDRA L. TIREY — 887-1274

Manager, Health Programs
KAREN W. CREEDON — 887-1384

Associate Director, (CAER)
DEBORAH J. WIENER — 887-1150

Director, Safety and Plant Operations
DONALD D. HELIN — 887-1296

Manager, Safety and Plant Operations
DAVID A. HASTINGS — 887-1280

Associate Director, Safety and Plant Operations
DIANA T. ARTEMIS — 887-1386

— continued

Members ex officio

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STAFF — continued

TECHNICAL — continued

Director, Distribution Programs

RICHARD M. DOYLE — 887-1272

Manager, Emergency Response Planning and Training

ALMA M. HOWARD — 887-1263

Manager, Distribution Safety Programs

FRANK J. PRINCIPI — 887-1262

Manager, Distribution Safety Programs

MICHAEL HEIMOWITZ — 887-1360

FEDERAL GOVERNMENT RELATIONS DEPARTMENT

Vice President — Federal Government Relations

WILLIAM M. STOVER — 887-1122

Director, Federal Legislative Affairs (Superfund and Product Liability)

TIMOTHY F. BURNS — 887-1124

Legislative Representative (Patents and Special Programs)

ROSE MARIE SANDERS — 887-1123

Legislative Representative (Hazardous Waste and Groundwater)

ROBERT B. FLAGG — 887-1141

Legislative Manager (Air and Water Quality)

KAREN J. NEALE — 887-1126

Legislative Representative (Health and Safety)

EILEEN M. WINKELMAN — 887-1134

Legislative Representative (Energy and Transportation)

GARY W. GRIFFITH — 887-1136

Legislative Representative (Taxation and Trade)

CLAUDE P. BOUDRIAS — 887-1138

Manager, Federal Grassroots Program

BRADLY A. BROADWELL — 887-1146

Assistant Manager of Grassroots

RICHARD T. WILLIAMS — 887-1341

Director, Trade and Economics

ALLEN J. LENZ — 887-1132

Associate Director (Taxation)

ROBERT B. HILL — 887-1128

Associate Director (Energy)

THOMAS PARKER, JR. — 887-1167

FEDERAL GOVERNMENT — continued

Associate Director (International Trade)

K. JAMES O'CONNOR, JR. — 887-1130

Senior Economist

T. KEVIN SWIFT — 887-1286

Economist

JENNIFER L. McDUFF — 887-1121

Director of International Affairs

R. GARRITY BAKER — 887-1338

COMMUNICATIONS DEPARTMENT

Vice President — Communications

JON HOLTZMAN — 887-1200

Administrative Assistant, Catalyst Awards

PATRICIA A. SOKOLOFF — 887-1223

Director, Responsible Care

LORI M. RAMONAS — 887-1264

Coordinator, Responsible Care

BONNIE M. GILLOTT — 887-1285

Director, Meetings and Conventions

EDIE FLEMING — 887-1114

Assistant Director, Meetings and Conventions

DEBORAH F. BRAWNER — 887-1316

Director, Media Communications

JEFFREY C. VAN — 887-1222

Associate Director, Media Communications

THOMAS J. GILROY — 887-1224

Editor, ChemEcology

LAURIE L. HAYES — 887-1204

Manager, Broadcast News Service

LINDA A. EDWARDS — 887-1139

Technical Coordinator

CHRISTOPHER PIANTADOSI — 887-1393

Director, Issue and Member Communications

JOHN E. SLAVICK — 887-1210

Senior Editor, CMA News

JAMES P. TURNER — 887-1206

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(Joint Trade)
R. — 887-1130

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F — 887-1121

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Service
— 887-1139

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COMMUNICATIONS — continued

Manager, Member Communications
LAURA E. DIAMOND — 887-1217

Manager, Communications Issues
JAYNE I. DAVIS — 887-1226

Manager, Member Communications
TIMOTHY M. RICHARDSON — 887-1218

STATE AFFAIRS DEPARTMENT

Vice President — State Affairs
JAMES D. McINTIRE — 887-1330

Director, State Federation and Association Liaison
D. CHRISTOPHER CATHCART — 887-1265

Director, State Issues
WILLIAM H. WESTENDORF — 887-1340

Associate Director, State Issues
JOAN E. RILEY — 887-1268

Manager, State Issues
LARRY F. GALLO — 887-1320

Manager, State Issues
MARY B. HEATON — 887-1342

Manager, State Issues
STEVEN M. MANZO — 887-1276

OFFICE OF GENERAL COUNSEL

Vice President — General Counsel
DAVID F. ZOLL — 887-1350

Deputy General Counsel
DONALD D. EVANS — 887-1354

Assistant General Counsels
KATHY D. BAILEY — 887-1186
MARILYN D. BROWNING — 887-1118
SUSAN T. CONTI — 887-1356
RONALD A. SHIPLEY — 887-1160
E. THOMAS SMERDON — 887-1158
MICHAEL P. WALLS — 887-1170

Counsels
NANCY C. COOKSON — 887-1241
ROBERT D. ONDOCSIN — 887-1352
DELL E. PERELMAN — 887-1162

GENERAL ADMINISTRATION

President
ROBERT A. ROLAND — 887-1106

Administrative Assistant
STEPHANIE A. HENRY — 887-1107

Vice President — Corporate Secretary
CHARLES W. VAN VLACK — 887-1108

Vice President — Treasurer
GARY C. HERRMAN — 887-1230

Director, Personnel
MIRTHA T. ORME — 887-1232

Controller
RAYMOND J. O'BRYAN — 887-1240

Assistant Controller
THOMAS E. HARLOW — 887-1221

Assistant Controller
ELIZABETH M. BURGAN — 887-1147

Manager, Employee Benefits
JANET C. SANDERS — 887-1242

Director, Business Services
J. MICHAEL McGRAW — 887-1336

Director, Printing, Distribution, Computer and
Information Services
BENTON D. COOK — 887-1212

Associate Director, Management Information Systems
DENNIS B. BUSTAMANTE — 887-1332

Manager, Management Information Systems
NADER YOUSEFIAN — 887-1346

Manager, Printing and Mail Services
JAMES L. CLARK — 887-1250



BOARD OF DIRECTORS

TERM ENDING MAY 31, 1991

RAYMOND F. BENTELE
Mallinckrodt, Inc., P.O. Box 5840, St. Louis,
MO 63134

JOHN D. BURNS
Vista Chemical Company, 900 Threadneedle,
Houston, TX 77079

VINCENT A. CALARCO
Crompton & Knowles Corporation, One Station
Place, Metro Center, Stamford, CT 06902

W. H. CLARK, JR.
Nalco Chemical Company, One Nalco Center,
Naperville, IL 60563-1198

EARNEST W. DEAVENPORT, JR.
Eastman Chemical Company, P.O. Box 511,
Kingsport, TN 37622

ERNEST H. DREW
Hoechst Celanese Corporation, Route 202-206
North, Somerville, NJ 08876

GLEN H. HINER
GE Plastics, One Plastics Ave., Pittsfield, MA 01201

GERALD L. HOERIG
Syntex Chemicals, Inc., 2075 N. 55th St., Boulder,
CO 80301

DAVID S. HOLLINGSWORTH
Hercules Incorporated, Hercules Plaza, 1313 N.
Market St., Wilmington, DE 19894

DONALD E. KOLOWSKY
Pfizer Inc., 235 E. 42nd St., New York, NY
10017-5755

H. WILLIAM LICHTENBERGER
Union Carbide Corporation, 39 Old Ridgebury
Danbury, CT 06817-0001

ROBERT H. MALOTT
FMC Corporation, 200 E. Randolph Dr., Chicag
IL 60601

PETER J. NEFF
Rhône-Poulenc Inc., CN5266, Princeton, NJ
08543-5266

JOHN D. ONG
The BFGoodrich Company, 3925 Embassy
Parkway, Akron, OH 44313

JOHN E. PEPPERCORN
Chevron Chemical Company, P.O. Box 5047,
T4004, San Ramon, CA 94583-0947

HERBERT A. SKLENAR
Vulcan Materials Company, Metroplex 1 Dr.,
Birmingham, AL 35253-0497

ORIN R. SMITH
Engelhard Corporation, Menlo Park, CN40,
33 Wood Ave. South, Edison, NJ 08818-2901

F. QUINN STEPAN
Stepan Company, 22 W. Frontage Rd., Northfield
IL 60093

LAWRENCE A. WIGDOR
Kronos, Inc. - Rheox, Inc., P.O. Box 700,
Hightstown, NJ 08520

TERM ENDING MAY 31, 1992

CHARLES A. ALDAG
Sherex Chemical Company, Inc., P.O. Box 646,
Dublin, OH 43017

RICHARD BARTH
CIBA-GEIGY Corporation, 444 Saw Mill River Rd.,
Ardsley, NY 10502

ELWOOD P. BLANCHARD, JR.
E. I. du Pont de Nemours & Company, 1007 Mar
St., Wilmington, DE 19898

J. ROGER HIRL
Occidental Chemical Corporation, P.O. Box
809050, Dallas, TX 75380

TERM ENDING MAY 31, 1992 — continued

BEN H. LOCHTENBERG
ICI Americas Inc., Concord Pike & New Murphy
Rd., Wilmington, DE 19897

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Grace Specialty Chemicals Co., Grace Plaza, 1114
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Air Products and Chemicals, Inc., 7201 Hamilton
Blvd., Allentown, PA 18195

FREDERIC M. POSES
Allied-Signal Inc., P.O. Box 3000R, Morristown,
NJ 07960

M. WHITSON SADLER
Solvay America, Inc., 3333 Richmond Ave.,
Houston, TX 77098

ARTHUR R. SIGEL
Velsicol Chemical Corporation, 5600 N. River Rd.,
Rosemont, IL 60018

HAROLD A. SORGENTI
ARCO Chemical Company, 3801 W. Chester Pike,
Newtown Square, PA 19073-2387

JOHN HOYT STOOKEY
Quantum Chemical Corporation, 99 Park Ave.,
New York, NY 10016

ROBERT G. WEEKS
Mobil Corporation, 150 E. 42nd St., New York,
NY 10017

H. DANIEL WENSTRUP
CHEMCENTRAL Corporation, 7050 W. 71st St.,
Chicago, IL 60638

J. LAWRENCE WILSON
Rohm and Haas Company, Independence Mall
West, Philadelphia, PA 19105

TERM ENDING MAY 31, 1993

CYRIL C. BALDWIN, JR.
Cambrex Corporation, One Meadowlands Plaza,
East Rutherford, NJ 07073

J. A. (FRED) BROTHERS
Ashland Oil, Inc., P.O. Box 2219, Columbus,
OH 43216

ROBERT D. CADIEUX
Amoco Chemical Company, P.O. Box 87759,
Chicago, IL 60680-0759

BOB G. GOWER
Lyondell Petrochemical Company, P.O. Box 3646,
Houston, TX 77253-3646

PETER R. HEINZE
BASF Corporation, P.O. Box 181, Parsippany, NJ
07054

JON M. HUNTSMAN
Huntsman Chemical Corporation, 200 Eagle Gate
Tower, 60 East South Temple St., Salt Lake City,
UT 84111

CONRAD S. KENT
Akzo Chemicals Inc., 300 S. Riverside Plaza,
Chicago, IL 60606

TRUMAN L. KOEHLER
Sandoz Corporation, 4000 Monroe Rd., Charlotte,
NC 28205

THOMAS MARSHALL
Aristech Chemical Corporation, 600 Grant St.,
Pittsburgh, PA 15230-0250

SEYMOUR S. PRESTON, III
ATOCHEM North America, Inc., Pennwalt Bldg.,
Three Parkway, Philadelphia, PA 19102

— continued

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BOARD — continued

TERM ENDING MAY 31, 1993 — continued

S. JAY STEWART
Morton International, Inc., 110 N. Wacker Dr.,
Chicago, IL 60606-1560

BILL M. THOMPSON
Phillips Petroleum Company, Phillips Bldg.,
Bartlesville, OK 74004

HEINN F. TOMFOHRDE, III
GAF Chemicals Corporation, 1361 Alps Rd.,
Wayne, NJ 07470

WILLIAM WISHNICK
Witco Corporation, 510 Madison Ave., New York,
NY 10022-4236

**ME****BOARD OF DIRECTORS**

BOARD OF DIRECTORS

September 10-11
November 5
January 15
April 8-9
June 5

EXECUTIVE COMMITTEE

September 10
November 4
January 14
March 5
April 8
May 7
June 5

FINANCE COMMITTEE

March 4
April 7



MEETING SCHEDULES

BOARD OF DIRECTORS AND BOARD COMMITTEES

BOARD OF DIRECTORS

September 10-11
November 5
January 15
April 8-9
June 5

EXECUTIVE COMMITTEE

September 10
November 4
January 14
March 5
April 8
May 7
June 5

FINANCE COMMITTEE

March 4
April 7



COMMITTEES OF THE BOARD OF DIRECTORS

EXECUTIVE COMMITTEE

FUNCTION: To exercise the powers of the Board of Directors with respect to conducting the business and affairs of the

Association, including all matters of policy and administration, except when the Board of Directors is in session.

CHAIRMAN
JOHN W. JOHNSTONE, JR.

ELWOOD P. BLANCHARD, JR.
E. I. du Pont de Nemours & Company, 1007 Market
St., Wilmington, DE 19898

ROBERT D. CADIEUX
Amoco Chemical Company, P.O. Box 87759,
Chicago, IL 60680-0759

EARNEST W. DEAVENPORT, JR.
Eastman Chemical Company, P.O. Box 511,
Kingsport, TN 37662

ERNEST H. DREW
Hoechst Celanese Corporation, Route 202-206
North, Somerville, NJ 08876

GLEN H. HINER
GE Plastics, One Plastics Ave., Pittsfield, MA 01201

J. ROGER HIRL
Occidental Chemical Corporation, P.O. Box
809050, Dallas, TX 75380

DAVID S. HOLLINGSWORTH
Hercules Incorporated, Hercules Plaza, 1313 N.
Market St., Wilmington, DE 19894

JOHN W. JOHNSTONE, JR.
Olin Corporation, P.O. Box 1355, Stamford, CT
06904-1355

E. EUGENE McBRAYER
Exxon Chemical Company, 9 Old Kings Highway
South, Darien, CT 06820-4575

JOHN E. PEPPERCORN
Chevron Chemical Company, P.O. Box 5047,
T8004, San Ramon, CA 94583-0947

FRANK P. POPOFF
The Dow Chemical Company, 2030 Willard H. Dow
Center, Midland, MI 48674

ROBERT A. ROLAND
Chemical Manufacturers Association, 2501 M St.,
N.W., Washington, DC 20037

M. WILSON SADLER
Sulray America, Inc., 3333 Richmond Ave.,
Houston, TX 77098

F. QUINN STEPAN
Stepan Company, 22 W. Frontage Rd., Northfield,
IL 60093

J. LAWRENCE WILSON
Rohm and Haas Company, Independence Mall
West, Philadelphia, PA 19205

FINANCE CO

FUNCTION: To advise the Association on all matters relating to financing, membership, and other financial matters.

CHAIRMAN
J. ROGER HIRL

JOHN D. BURNS
Vista Chemical Corporation, P.O. Box 1355,
Houston, TX 77075

W. H. CLARK, JR.
Nalco Chemical Company, P.O. Box 1355,
Naperville, IL 60563

PETER R. HEINZE
BASF Corporation, P.O. Box 1355,
NJ 07054

J. ROGER HIRL
Occidental Chemical Corporation, P.O. Box
809050, Dallas, TX 75380

H. WILLIAM LICHTEN
Union Carbide Corporation, P.O. Box 1355,
Danbury, CT 06817

FINANCE COMMITTEE

FUNCTION: To advise the Board of Directors on policy relating to financing, membership fees, and the budget.

CHAIRMAN
J. ROGER HIRL

JOHN D. BURNS
Vista Chemical Company, 900 Threadneedle,
Houston, TX 77079

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Nalco Chemical Company, One Nalco Center,
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Vulcan Materials Company, Metroplex 1 Dr.,
Birmingham, AL 35253-0497

HAROLD A. SORGENTI
ARCO Chemical Company, 3801 W. Chester Pike,
Newtown Square, PA 19073



MEMBERSHIP COMMITTEE

FUNCTION: To receive and pass upon each application for membership in the Association, and to report to the Board of

Directors as to eligibility for membership of each applicant under the Bylaws.

CHAIRMAN

VINCENT A. CALARCO

CYRIL C. BALDWIN, JR.

Cambrex Corporation, One Meadowlands Plaza,
East Rutherford, NJ 07073

VINCENT A. CALARCO

Crompton & Knowles Corporation, One Station
Place, Metro Center, Stamford, CT 06902

ROBERT H. MALOTT

FMC Corporation, 200 E. Randolph Dr., Chicago,
IL 60601

THOMAS MARSHALL

Aristech Chemical Corporation, 600 Grant St.,
Pittsburgh, PA 15230-0250

FREDERIC M. POSES

Allied-Signal Inc., P.O. Box 3000R, Morristown,
NJ 07960

ARTHUR R. SIGEL

Velsicol Chemical Corporation, 5600 N. River Rd.,
Rosemont, IL 60018

S. JAY STEWART

Morton International, Inc., 110 N. Wacker Dr.,
Chicago, IL 60606-1560

JOHN HOYT STOOKEY

Quantum Chemical Corporation, 99 Park Ave.,
New York, NY 10016

HEINN F. TOMFOHRDE, III

CAF Chemicals Corporation, 1361 Alps Rd.,
Wayne, NJ 07470

H. DANIEL WENSTRUP

CHEMCENTRAL Corporation, 7050 W. 71st St.,
Chicago, IL 60638

LAWRENCE A. WIGDOR

Kronos, Inc. — Rheox, Inc., P.O. Box 700,
Hightstown, NJ 08520

PROGRAM

FUNCTION: To plan the Chemical Industry

CHAIRMAN

J.A. (FRED) BROTH

CHARLES A. ALDA

Sherex Chemical
Dublin, OH 430

J.A. (FRED) BROTH

Ashland Oil, Inc.
OH 43216

GERALD L. HOERIG

Syntex Chemical
CO 80301

JON M. HUNTSMAN

Huntsman Chemical
Tower, 60 East
UT 84111

BEN H. LOCHTEN

ICI Americas Inc.
Rd., Wilmington

Note: In addition, the elected officers are ex officio members

VVV 000004888

PROGRAM COMMITTEE

FUNCTION: To plan the programs of the Annual Meeting and the Chemical Industry Conference of the Association.

CHAIRMAN

J.A. (FRED) BROTHERS

CHARLES A. ALDAG

Sherex Chemical Company, Inc., P.O. Box 646,
Dublin, OH 43017

J.A. (FRED) BROTHERS

Ashland Oil, Inc., P.O. Box 2219, Columbus,
OH 43216

GERALD L. HOERIG

Syntex Chemicals, Inc., 2075 N. 55th St., Boulder,
CO 80301

JON M. HUNTSMAN

Huntsman Chemical Corporation, 2000 Eagle Gate
Tower, 60 East South Temple St., Salt Lake City,
UT 84111

BEN H. LOCHTENBERG

ICI Americas Inc., Concord Pike & New Murphy
Rd., Wilmington, DE 19897

J. ROBERT LOVETT

Air Products and Chemicals, Inc., 7201 Hamilton
Blvd., Allentown, PA 18195

PETER J. NEFF

Rhone-Poulenc Inc., CN5266, Princeton, NJ
08543-5266

SEYMOUR S. PRESTON, III

ATOCHEM North America, Inc., Pennwalt Bldg.,
Three Parkway, Philadelphia, PA 19102

ROBERT G. WEEKS

Mobil Corporation, 150 E. 42nd St., New York,
NY 10017

WILLIAM WISHNICK

Witco Corporation, 520 Madison Ave., New York,
NY 10022-4236

VVV 000004889



EMPLOYEE BENEFITS COMMITTEE

FUNCTION: To advise the Board of Directors regarding benefits, financing, and administration of the Association's employee

pension plan and all other non-salary employee benefits

CHAIRMAN
RAYMOND F. BENTELE

RICHARD BARTH
CIBA-GEIGY Corporation, 444 Saw Mill River Rd.,
Ardsley, NY 10502

RAYMOND F. BENTELE
Mallinckrodt, Inc., P.O. Box 5840, St. Louis,
MO 63134

BOB G. GOWER
Lyondell Petrochemical Company, P.O. Box 3646,
Houston, TX 77253-3646

CONRAD S. KENT
Akzo Chemicals Inc., 300 S. Riverside Plaza,
Chicago, IL 60606

TRUMAN L. KOEHLER
Sandoz Corporation, 4000 Monroe Rd., Charlotte,
NC 28205

DONALD E. KOLOWSKY
Pfizer Inc., 235 E. 42nd St., New York, NY
10017-5755

ORIN R. SMITH
Engelhard Corporation, Menlo Park, CN40,
33 Wood Ave. South, Edison, NJ 08818-2901

BILL M. THOMPSON
Phillips Petroleum Company, Phillips Bldg.,
Bartlesville, OK 74004



COMMUNICATIONS COMMITTEE

PURPOSES: With respect to public relations, the Committee will advise the Executive Committee on attitudes involving the

CHAIRMAN*
VICKY M. SUAZO

VICE CHAIRMAN*
D. BRENT MCGINNIS

TERM ENDING MAY 1990
WILLIAM R. JENKINS
FMC Corporation,
IL 60601

DONALD R. KIRTLING
Hercules Incorporated,
Market St., Wil

J. L. (LYNN) MADDOCK
Chevron Chemical Company,
San Ramon, CA

GEORGE P. MIGA
Amoco Chemicals Corporation,
MC3705, Chicago, IL

WILLIAM H. SCARE
Shell Oil Company,
TX 77252

VICKY M. SUAZO
Dow Chemical Company,
Washington, DC

TERM ENDING MAY 1991
WILLIAM C. ADAMS
ICI Americas Inc.,
DE 19897

ROBERT M. BERZO
Union Carbide Corporation,
C-2201, Danbury, CT

THOMAS A. CHIZM
CIBA-GEIGY Corporation,
Ardsley, NY 10505

Note: In addition, the elected officers are ex officio members.

VVV 000004890



STANDING COMMITTEES

COMMUNICATIONS COMMITTEE

PURPOSES: With respect to communications, the Committee will advise the Executive Committee and staff on problems and attitudes involving the chemical industry's relations with the

public and provide guidance and assistance on the initiation and implementation of constructive programs in this area.

CHAIRMAN*

VICKY M. SUAZO

VICE CHAIRMAN*

D. BRENT MCGINNIS

STAFF EXECUTIVE

JEFFREY C. VAN

TERM ENDING MAY 31, 1991

WILLIAM R. JENKINS

FMC Corporation, 200 E. Randolph Dr., Chicago,
IL 60601

DONALD R. KIRTLEY

Hercules Incorporated, Hercules Plaza, 1313 N.
Market St., Wilmington, DE 19894

J.L. (LYNN) MADDOX

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Amoco Chemical Company, 200 E. Randolph Dr.,
MC3705, Chicago, IL 60601

WILLIAM H. SCARBOROUGH

Shell Oil Company, P.O. Box 2463, Houston,
TX 77252

VICKY M. SUAZO

Dow Chemical U.S.A., 1776 Eye St., NW, Suite 575,
Washington, DC 20006

TERM ENDING MAY 31, 1992

WILLIAM C. ADAMS

ICI Americas Inc., 6 Rollins Bldg., Wilmington,
DE 19897

ROBERT M. BERZOK

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C-2201, Danbury, CT 06817

THOMAS A. CHIZMADIA

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Ardsley, NY 10502

WILLIAM M. CORCORAN

Allied-Signal Inc., Engineered Materials Sector,
P.O. Box 1087R, Morristown, NJ 07960

D. BRENT MCGINNIS

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TERM ENDING MAY 31, 1993

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ALEXANDER M. HOUSTON

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06904-1355

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Pennsylvania Ave., NW, Suite 900, Washington,
DC 20006

JILL B. JOHNSON

Exxon Chemical Americas, P.O. Box 3272,
Houston, TX 77253-3272

LOUIS H. KISTNER

SCM Chemicals, Inc., 7 St. Paul St., Suite 1010,
Baltimore, MD 21202

*Through May 31, 1991

VVV 000004891



DISTRIBUTION COMMITTEE

PURPOSES: Under the policies established by the Board of Directors and within the authority specified by the Executive Committee, the Committee oversees Association programs to insure safe and efficient distribution of chemicals and to promote effective emergency response. In doing so, the Committee will: identify key issues and focus efforts on matters of greatest significance to the chemical manufacturing industry; establish specific objectives on key issues and mobilize resources to produce timely results; develop and recommend to the Executive Committee policies and positions on legislative, regulatory and technical questions; advocate effective and reasonable legisla-

tion on the distribution of chemicals; advise the Executive Committee on Association staffing and resources required by the Committee to achieve its objectives; help member companies understand the major trends, developments, key issues, and Association actions in the distribution area; develop public awareness of chemical manufacturing industry contributions to the safe distribution of chemicals; sponsor joint initiatives with other organizations to continue to improve the safe distribution of chemicals; and promote member participation in CMA initiatives.

CHAIRMAN*
ROBERT P. FRENCH

VICE CHAIRMAN*
PHILIP R. GRIFFITHS

TERM ENDING MAY 31, 1991

JOSEPH J. CATTO
American Cyanamid Company, One Cyanamid
Plaza, Wayne, NJ 07470

GORDON E. CHRISTMAN
Mobay Corporation, ~~Mobay~~ Rd., Pittsburgh, PA
15205-9741

PHILIP R. GRIFFITHS
Exxon Chemical Americas, 13501 Katy Freeway,
Houston, TX 77079

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Rohm and Haas Company, Independence Mall
West, Philadelphia, PA 19105

J.C. WILLIAMS
The Procter & Gamble Company, P.O. Box 599,
Cincinnati, OH 45217

TERM ENDING MAY 31, 1992

MARVIN A. CRANE
Ethyl Corporation, 451 Florida St., Baton Rouge,
LA 70801

ROBERT P. FRENCH
E.I. du Pont de Nemours & Company, Materials &
Logistics Dept., Wilmington, DE 19898

A.S. RIVERS
Monsanto Company, 800 N. Lindbergh Blvd., St.
Louis, MO 63167

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RICHARD M. DOYLE

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Chevron Chemical Company, 6001 Bollinger
Canyon Rd., San Ramon, CA 94583-0947

RONALD R. WEBER
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TERM ENDING MAY 31, 1993

JOHN J. ARCHER
Ashland Chemical Company, P.O. Box 2219,
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DONALD A. CENTER
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Danbury, CT 06817-0001

DONALD M. MURRAY
The BFGoodrich Company, 6100 Oak Tree Blvd.,
Cleveland, OH 44131

EDWARD D. OLMO
Shell Chemical Company, P.O. Box 2463, Houston,
TX 77252

B. FIELDING ROLSTON
Eastman Chemical Company, P.O. Box 511,
Kingsport, TN 37662

ENERGY COM

PURPOSES: With respect to productivity matters that affect the manufacturing industry, in particular, the discussion of chemical manufacturing and major industrial energy con-

CHAIRMAN*
ROYCE D. LAFFITTE

VICE CHAIRMAN*
THOMAS D. FINNIGAN

TERM ENDING MAY 31, 1991

JOHN C. deRUYTER
E. I. du Pont de Nemours & Company, 6090, Newark, DE

THOMAS D. FINNIGAN
Union Carbide Cor-
Suite 1200, Washin

THOMAS A. GAMBLE
Hercules Incorporated
Market St., Wilmin

PAT L. MAISTO
BASF Corporation,
NJ 07054

EDWARD H. MERGENS
Shell Chemical Cor-
TX 77252

TERM ENDING MAY 31, 1992

WILLIAM H. CHAMBERLAIN
Vista Chemical Cor-
Houston, TX 77079

NORMAN L. DAVIS
Monsanto Company,
Louis, MO 63167

GARY S. FURMAN
American Cyanamid
Plaza, Wayne, NJ 0

*Through May 31, 1991

VVV 000004892

ENERGY COMMITTEE

PURPOSES: With respect to energy utilization and energy productivity matters that are significant to the chemical manufacturing industry, including those relating to petrochemical feedstocks, the Committee will: serve as a forum for discussion of chemical manufacturing industry concerns as a major industrial energy consumer; monitor, evaluate and an-

alyze the chemical industry's interest in proposed legislation and regulations; develop and recommend to the Executive Committee appropriate Association activities, programs, policies and positions on legislative, regulatory and technical questions; and provide support for other authorized Association programs as they relate to energy issues.

CHAIRMAN*

ROYCE E. LAFFITTE

VICE CHAIRMAN*

THOMAS D. FINNIGAN

STAFF EXECUTIVE

THOMAS PARKER, JR.

TERM ENDING MAY 31, 1991

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THOMAS A. GAMBLE
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PAT L. MAISTO
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NJ 07054

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Shell Chemical Company, P.O. Box 2463, Houston,
TX 77252

TERM ENDING MAY 31, 1992

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Vista Chemical Company, 900 Threadneedle,
Houston, TX 77079

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Louis, MO 63167

GARY S. FURMAN
American Cyanamid Company, One Cyanamid
Plaza, Wayne, NJ 07470

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TERM ENDING MAY 31, 1993

R. DAVID DAMRON
Hoechst Celanese Chemical Group, P.O. Box
569320, Dallas, TX 75356-9320

ROYCE D. LAFFITTE
Eastman Chemical Company, P.O. Box 7444,
Longview, TX 75607

GEORGE MATZKE
GAF Corporation, 1361 Alps Rd., Wayne, NJ 07470

ROY NOBLE
Rhône-Poulenc Inc., CN5266, Princeton, NJ
08543-5266

JAMES E. YOCHIM
Chevron Chemical Company, P.O. Box 3766,
Houston, TX 77253

*Through May 31, 1991

VVV 000004893



ENGINEERING AND OPERATIONS COMMITTEE

PURPOSES: With respect to engineering design, construction, operation, and maintenance of facilities for manufacture, storage and handling of industrial chemicals as significant to the chemical manufacturing industry, the Committee will: serve as a forum for discussion of chemical manufacturing industry

concerns; develop and recommend to the Executive Committee policies and positions on legislative, regulatory, and technical questions; and provide support for authorized Association programs.

CHAIRMAN*
PERCY R. KAVASMANECK

VICE CHAIRMAN*
RAY E. OLSEN

TERM ENDING MAY 31, 1991

VANCE M. BAKEMAN
Grace Specialty Chemicals Co., 1114 Avenue of the Americas, New York, NY 10036

TED F. HENKEN
Chevron Chemical Company, 6001 Bollinger Canyon Rd., Bldg. T-4318, San Ramon, CA 94583

PERCY R. KAVASMANECK
Union Carbide Corporation, P.O. Box 8361, South Charleston, WV 25303

LARRY D. SHAYER
Monsanto Company, 800 N. Lindbergh Blvd., St. Louis, MO 63167

TERM ENDING MAY 31, 1992

VICTOR E. BAKER
CIBA-GEIGY Corporation, 444 Saw Mill River Rd., Ardsley, NY 10502

LANDON N. KENNY
Tennessee Eastman Company, P.O. Box 511, Kingsport, TN 37662

WILLIAM J. MANN
Pfizer Inc., 235 E. 42nd St., New York, NY 10017-5755

STAFF EXECUTIVE
DONALD D. HELIN

RAY E. OLSEN
Exxon Chemical Company, P.O. Box 400, Baytown, TX 77522-2090

WILLIAM L. TANNER
Shell Chemical Company, P.O. Box 2033, Houston, TX 77024

TERM ENDING MAY 31, 1993

LARRY L. HENDERSON
Hoechst Celanese Corporation, Route 202-206 North, Somerville, NJ 08876

EUGENE J. KLOSAK
Nalco Chemical Company, One Nalco Center, Naperville, IL 60563-1198

MacGREGOR SCOTT
ARCO Chemical Company, 3801 W. Chester Pike, Newtown Square, PA 19073-2387

RANDALL E. VARILEK
Air Products and Chemicals, Inc., 7201 Hamilton Blvd., Allentown, PA 18195

JAMES N. WILKES
The Dow Chemical Company, 400 W. Sam Houston Parkway South, Houston, TX 77042-1299

ENVIRONMENTAL COMMITTEE

PURPOSES: Under the Board of Directors and the Executive Committee, the Environmental Committee identifies key environmental issues of greatest significance, establishes specific objectives, produces and advocates responsible environmental programs which consider economic effectiveness, risks, and

CHAIRMAN*
THOMAS L. JENNIFER

VICE CHAIRMAN*
HUGH J. CAMPBELL

TERM ENDING MAY 31, 1991
HUGH J. CAMPBELL
E.I. du Pont de Nemours & Co., P.O. 609

THOMAS L. JENNIFER
Occidental Chemical Corp., Blvd. South, Bldg. 100, St. Louis, MO 63167

JERRY B. MARTIN
Dow Chemical Company, Midland, MI 48624

JOHN M. SALMELA
Chevron Chemical Company, Canyon Blvd., Bldg. 100, San Francisco, CA 94583-0947

TERM ENDING MAY 31, 1992
GERALD I. BRESNAN
Amoco Chemical Company, Chicago, IL 60601

CHARLES D. MALLON
Monsanto Company, St. Louis, MO 63167

MICHAEL M. MARS
Lonza Inc., 17-11

*Through May 31, 1991

ENVIRONMENTAL MANAGEMENT COMMITTEE

PURPOSES: Under the broad policies established by the Board of Directors and within limits of authority specified by the Executive Committee, the Committee oversees Association environmental activities. In so doing, the Committee will: identify key environmental issues and focus efforts on matters of greatest significance to the chemical manufacturing industry; establish specific objectives on the key issues and mobilize resources to produce decisive timely results; aggressively advocate responsible environmental legislation and regulation which consider economic impacts, energy implications, cost effectiveness, risks, and benefits; seek relief from unreasonable

environmental legislation and regulation by appropriate means, which may include legal action; advise the Executive Committee on Association staffing and resources required by the Committee to achieve its objectives; help member companies understand their environmental responsibilities by informing them of major trends, developments, key issues, and Association actions; develop awareness of chemical manufacturing industry contributions to environmental management and facts surrounding key issues; and initiate and sponsor research and development on environmental issues of widespread interest to the chemical manufacturing industry.

CHAIRMAN*

THOMAS L. JENNINGS

VICE CHAIRMAN*

HUGH J. CAMPBELL, JR.

TERM ENDING MAY 31, 1991

HUGH J. CAMPBELL, JR.

E. I. du Pont de Nemours & Company, Engineering
Dept., P.O. 6090, Newark, DE 19714-6090

THOMAS L. JENNINGS

Occidental Chemical Corporation, 360 Rainbow
Blvd. South, Box 728, Niagara Falls, NY 14302

JERRY B. MARTIN

Dow Chemical U.S.A., 2020 Willard H. Dow Center,
Midland, MI 48674

JOHN M. SALMELA

Chevron Chemical Company, 6001 Bollinger
Canyon Rd., Bldg. T2000, San Ramon, CA
94583-0947

TERM ENDING MAY 31, 1992

GERALD I. BRESNICK

Amoco Chemical Company, P.O. Box 87759,
Chicago, IL 60680-0759

CHARLES D. MALLOCH

Monsanto Company, 800 N. Lindbergh Blvd., St.
Louis, MO 63167

MICHAEL M. MARSHALL

Lonza Inc., 17-17 Route 208, Fair Lawn, NJ 07410

STAFF EXECUTIVE

JOE J. MAYHEW

CARL MATTIA

The BFGoodrich Company, 3925 Embassy
Parkway, Akron, OH 44313

RICHARD L. MONTY

GE Plastics, One Plastics Ave., Pittsfield, MA 01201

TERM ENDING MAY 31, 1993

ROBERT T. JACKSON

Union Carbide Corporation, 39 Old Ridgebury Rd.,
Danbury, CT 06817-0001

RONALD R. KIENLE

Shell Chemical Company, P.O. Box 2463, Houston,
TX 77252

DAVID M. KISER

Eastman Kodak Company, 1776 Eye St., NW, Suite
1050, Washington, DC 20006

ROBERT C. NILES

Grace Specialty Chemicals Co., 55 Hayden Ave.,
Lexington, MA 02173

CHARLES T. SEAY

Exxon Chemical Americas, 13501 Katy Freeway,
Houston, TX 77079

*Through May 31, 1991

VVV 000004895



FEDERAL GOVERNMENT RELATIONS COMMITTEE

PURPOSES: With respect to communications between the chemical manufacturing industry and the federal government on matters significant to the chemical manufacturing industry, the Committee will: seek to anticipate, identify, and establish priorities with respect to issues and opportunities; advise the Executive Committee and other Association entities regarding

policy formation; participate in the planning of Association programs aimed at specific issues or objectives, with emphasis on strategy considerations; oversee and participate in the execution of legislative programs; and monitor, evaluate, and seek to enhance the effectiveness of authorized Association programs.

CHAIRMAN*
WILLIAM T. LYONS

VICE CHAIRMAN*
CHARLES H. ROWTON

TERM ENDING MAY 31, 1991

ALAN D. FIERS
Grace Specialty Chemicals Co., 919 18th St., NW,
Suite 400, Washington, DC 20006

DONALD R. GREELEY
Hoechst Celanese Corporation, 919 18th St., NW,
Suite 700, Washington, DC 20006

CHARLES H. ROWTON
Exxon Corporation, 1899 L St., NW, Suite 1100,
Washington, DC 20036

HAROLD S. RUSSELL
FMC Corporation, 1627 K St., NW, Suite 500,
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RALPH D. SCHUMACK
Dow Corning Corporation, 1800 M St., NW, Suite
325 South, Washington, DC 20036

TERM ENDING MAY 31, 1992

JULIE ARCHULETA
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Pennsylvania Ave., NW, Suite 375, Washington,
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TIMOTHY F. BURNS

WELLS DENYES
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WILLIAM T. LYONS
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NW, Suite 700, Washington, DC 20006

TERM ENDING MAY 31, 1993

GERRIE BJORNSON
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Union Carbide Corporation, 1100 15th St., NW,
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JOSEPH J. MARTYAK
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Pennsylvania Ave., NW, Suite 900, Washington,
DC 20006

THOMAS C. MORRIS
Phillips Petroleum Company, 1776 Eye St., NW,
Suite 700, Washington, DC 20006

*Through May 31, 1991

HEALTH

PURPOSES: 1
concerning human health
identify key health issues of
greatest significance
objectives and develop and
recon positions on leg

CHAIRMAN*
JOHN C. WILLI

VICE CHAIRMAN*
THOMAS J. M.

TERM ENDING
WALLACE F. E.
Dow Corn
MI 48686

JAMES H. PRI
Quantum
Dr., Cincir

JAMES H. SEN
Monsanto
Louis, MO

DAVID D. SIGM
Exxon Che
Houston, T

JOHN C. WILLI
Shell Oil C
TX 77210

TERM ENDING
EUGENE C. CAI
ARCO Cher
Newtown S

SUSAN P. ENGE
Hoechst Ce
North, Som

MARVIN A. FRIE
American C
Plaza, Wayr

HEALTH AND SAFETY COMMITTEE

PURPOSES: The Committee oversees Association programs concerning human health and safety. The Committee will: identify key health and safety issues and focus on matters of greatest significance to the chemical industry; establish specific objectives and mobilize resources to produce timely results; develop and recommend to the Executive Committee policies and positions on legislative, regulatory, and technical questions;

provide cost-effective support for authorized Association programs that enhance chemical industry productivity and competitiveness through health and safety programs; seek relief from unreasonable health and safety legislation and regulation by appropriate means; sponsor research and development on human health and safety issues of widespread interest to the chemical industry.

CHAIRMAN*

JOHN C. WILLETT

VICE CHAIRMAN*

THOMAS J. MARRIOT, JR.

STAFF EXECUTIVE

KATHRYN A. ROSICA

TERM ENDING MAY 31, 1991

WALLACE F. DYSTE

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MI 48686-0994

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Dr., Cincinnati, OH 45249

JAMES H. SENDER

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DAVID D. SIGMAN

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TX 77210

TERM ENDING MAY 31, 1992

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MARVIN A. FRIEDMAN

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PHILIP C. LEWIS

Rohm and Haas Company, P.O. Box 584, Bristol,
PA 19007

HAINES B. LOCKHART

Eastman Kodak Company, 343 State St.,
Rochester, NY 14650

TERM ENDING MAY 31, 1993

JOHN J. KASPER

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THOMAS J. MARRIOT, JR.

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NEIL O. NEUNABER

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06904-1355

LADD W. SMITH

Occidental Chemical Corporation, 360 Rainbow
Blvd. South, Niagara Falls, NY 14302

GARY L. TER HAAR

Ethyl Corporation, 451 Florida St., Baton Rouge,
LA 70801

**Through May 31, 1991*



INTERNATIONAL TRADE COMMITTEE

PURPOSES: With respect to trade policy matters of interest to the chemical manufacturing industry, the Committee will: monitor international trade data and events, develop policies on

trade issues, recommend policies and action to the Executive Committee and provide support for authorized Association policies.

CHAIRMAN*

NANCIE S. JOHNSON

VICE CHAIRMAN*

JOSEPH A. GILLAN

TERM ENDING MAY 31, 1991

MARK BLASS

Air Products and Chemicals, Inc., 7201 Hamilton Blvd., Allentown, PA 18195-1501

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DONALD H. MARSHALL

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JOSEPH E. PATTISON

FMC Corporation, 2000 Market St., Philadelphia, PA 19103

TERM ENDING MAY 31, 1993

WILLIAM E. CORNELIUS

Dow Chemical U.S.A., 2020 Willard H. Dow Center, Midland, MI 48674

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The Procter & Gamble Company, One Procter & Gamble Plaza, Cincinnati, OH 45201

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EDWARD D. GRIFFITH

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SANDRA E. TAYLOR

ICI Americas Inc., 1600 M St., NW, Suite 702, Washington, DC 20036

TERM ENDING MAY 31, 1993

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POLLY HANNAS

W.R. Grace & Co., 919 18th St., NW, Suite 400, Washington, DC 20006

BUD C. PETTIGREW

Eastman Chemical International, P.O. Box 431, Kingsport, TN 37662

MICHAEL S. REYNOLDS

Vista Chemical Company, 900 Threadneedle, Houston, TX 77079

MAX L. TURNIPSEED

Ethyl Corporation, 1155 15th St., NW, Suite 611, Washington, DC 20005

STATE

PURPOSES

matters significant to the chemical industry, monitor and define and establish emerging issues, Executive Committee, Executive Association and delivery of products, Association and tactical plans

CHAIRMAN*

C. ROBERT

VICE CHAIRMAN*

D. LYNN JOHNSON

TERM ENDING MAY 31, 1991

C. ROBERT

Exxon Chemical Company, Houston

D. LYNN JOHNSON

Tennessee, Kingsport

RALPH C. LO

CIBA-GEIGY, Ardsley,

DEBORAH L.

The BFGoodrich Company, Parkway,

SUSAN M. WATSON

GE Plastics, Suite 800

TERM ENDING MAY 31, 1993

JAMES R. BULL

Ashland Chemical Company

GEOFFREY B.

Rohm and Haas Company, 210, Washington

GRAHAM H. JONES

Nalco Chemical Company, Naperville

*Through May 31, 1991

STATE AFFAIRS COMMITTEE

PURPOSES: With respect to state legislative and regulatory matters significant to the chemical industry, the Committee will: monitor and review proposed major legislation and regulations; define and establish priorities with respect to current and emerging issues and opportunities; advise the Board of Directors, Executive Committee, standing committees and other Association entities in the development, implementation and delivery of policy; provide support for and liaison with other Association programs and committees; recommend strategy and tactical plans for specified state issues, and manage implemen-

tation of strategy after approval; manage state issues by working through member companies, chemical councils and their Federation, state business associations, organizations representing state and local elected officials, and appropriate coalitions; implement direct legislative or regulatory advocacy on a selected basis in states with no CIC structure on issues of national significance to the chemical industry; and conduct long-range planning with respect to state legislative and regulatory issues.

CHAIRMAN*

C. ROBERT BALL

VICE CHAIRMAN*

D. LYNN JOHNSON

STAFF EXECUTIVE

WILLIAM H. WESTENDORF

TERM ENDING MAY 31, 1991

C. ROBERT BALL

Exxon Chemical Americas, 13501 Katy Freeway,
Houston, TX 77079

D. LYNN JOHNSON

Tennessee Eastman Company, P.O. Box 511,
Kingsport, TN 37662

RALPH C. LOOMIS

CIBA-GEIGY Corporation, 444 Saw Mill River Rd.,
Ardsley, NY 10502

DEBORAH L. NEALE

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Parkway, Akron, OH 44313

SUSAN M. WALTER

GE Plastics, 1331 Pennsylvania Ave., NW,
Suite 800, Washington, DC 20004

TERM ENDING MAY 31, 1992

JAMES R. BUTLER

Ashland Oil, Inc., P.O. Box 391, Russell, KY 41114

GEOFFREY B. HURWITZ

Rohm and Haas Company, 1667 K St., NW, Suite
210, Washington, DC 20006

GRAHAM H. JACKSON

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Naperville, IL 60563-1198

JERRY RING

Dow Chemical U.S.A., 47 Building, Midland,
MI 48667

DAVID A. SNIVELY

BP Chemicals, Inc., 200 Public Square, 40-5800-J,
Cleveland, OH 44144-2375

TERM ENDING MAY 31, 1993

D.H. BREWER

Olin Corporation, 4363 N. Ocoee St., Cleveland,
TN 37311

JERRY CHAMBERS

American Cyanamid Company, 1575 Eye St., NW,
Suite 200, Washington, DC 20005

ROBERT J. CHRISTIE

FMC Corporation, 200 E. Randolph Dr., Chicago,
IL 60601

TIMOTHY J. HOLT

Air Products and Chemicals, Inc., 7201 Hamilton
Blvd., Allentown, PA 18195

COLBERT R. WILHITE

E. I. du Pont de Nemours & Company, 1007 Market
St., D8078, Wilmington, DE 19898

**Through May 31, 1991*

TAX POLICY COMMITTEE

PURPOSES: With respect to federal and state tax matters, the Committee will: advise the Executive Committee of the formulation of Association policies; review proposed legislation, regulations, and treaties and recommend to the Executive

Committee appropriate Association positions thereon; develop and recommend to the Executive Committee proposals to be advocated by the Association for the revision of existing laws; and provide technical support for authorized Association programs.

CHAIRMAN*

RICHARD A. OVERTON

VICE CHAIRMAN*

GEORGE B. ERENSEN

TERM ENDING MAY 31, 1991

DOUGLAS E. BERG

Amoco Corporation, 200 E. Randolph Dr.,
Chicago, IL 60601

MICHAEL H. BURNSIDE

Chevron Chemical Company, 6001 Bollinger
Canyon Rd., San Ramon, CA 94583-0947

JOHN A. CARRIG

Phillips Petroleum Company, 710 Plaza Office
Bldg., Bartlesville, OK 74004

WILLIAM G. DAKIN

Mobil Corporation, 150 E. 42nd St., New York,
NY 10017

WILLIAMSON P. DONALD

E.I. du Pont de Nemours & Company, 1007 Market
St., Wilmington, DE 19898

THOMAS C. FRIEL

Rohm and Haas Company, Independence Mall
West, Philadelphia, PA 19105

TERM ENDING MAY 31, 1992

WILLIAM M. BELLAMY, JR.

Union Carbide Corporation, 39 Old Ridgebury Rd.,
Danbury, CT 06817

HOWARD KAREL

ARCO Chemical Company, 3801 W. Chester Pike,
Newtown Square, PA 19073

JAMES R. LOWE

Exxon Chemical Company, 9 Old Kings Highway
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STAFF EXECUTIVE

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Aristech Chemical Corporation, 600 Grant St.,
Suite 2858, Pittsburgh, PA 15230-0250

THOMAS G. SINGLEY

Shell Oil Company, P.O. Box 2463, Houston,
TX 77252

TERM ENDING MAY 31, 1993

SEAN T. CRIMMINS

Ashland Oil, Inc., P.O. Box 391, Ashland, KY 41114

ROBERT M. DOBRESKI

Eastman Kodak Company, 343 State St.,
Rochester, NY 14650

GEORGE B. ERENSEN

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CT 06904-1355

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JO ANNE LAWLER

Hercules Incorporated, Hercules Plaza, Room 7223
SW, Wilmington, DE 19894

M. D. (BUCK) MENSSEN

Minnesota Mining and Manufacturing Company,
3M Center, 220-6E-02, St. Paul, MN 55144-1000

ANTHONY J. SAGGESE

Texaco Inc., 2000 Westchester Ave., Suite 1001,
White Plains, NY 10650

*Through May 31, 1991

CHEMIC

PURPOSES: With respect to federal and state tax matters, the Committee will: advise the Executive Committee of the formulation of Association policies; review proposed legislation, regulations, and treaties and recommend to the Executive

CHAIRMAN*

GEORGE A. VINTAGE

VICE CHAIRMAN*

HAL BOZARTH

GERALD B. ALI

Chemical Industry
c/o Eastman
South San

DAVID C. ANGELO

Ohio Chemical
P.O. Box 31

DORSEY W. AYER

Chemical Company
5548 Manc

ROGER BEUTNER

Michigan Chemical
Corporation
MI 49355

DAN BORNE

Louisiana Chemical
Baton Rouge

HAL BOZARTH

Chemical Industry
Vicar Bldg.,

THACK BROWN

Chemical Industry
c/o Burrour
Cornwallis R

DONALD M. DAY

Chemical Company
Chesterfield,

WILLIAM J. DER

Alabama Chemical
Corporation,



SPECIAL COMMITTEES

CHEMICAL INDUSTRY FEDERATION ADVISORY COUNCIL

PURPOSES: With respect to implementation of the Chemical Industry Federation, the Chemical Industry Federation Advisory Council will: serve as a forum for addressing Federation implementation progress, ideas, activities and concerns; promote information exchange among Chemical Industry Councils, and between the Chemical Industry Councils and

CMA; comment on a range of CMA activities that affect the Chemical Industry Councils' abilities to conduct advocacy or carry out proactive initiatives, and advise the Association on how those activities can be improved and implemented through the Chemical Industry Councils.

CHAIRMAN

GEORGE A. VINCENT

VICE CHAIRMAN

HAL BOZARTH

GERALD B. ALLEN

Chemical Industry Council of California,
c/o Eastman Kodak Company, 270 Lawrence Ave.,
South San Francisco, CA 94080

DAVID C. ANGELL

Ohio Chemical Council, c/o PPG Industries, Inc.,
P.O. Box 31, Barberton, OH 44203

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Chemical Council of Missouri, c/o Rheox, Inc.,
5548 Manchester Ave., St. Louis, MO 63110

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Corporation, MC 552C, 7575 E. Fulton Rd., Ada,
MI 49355

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Louisiana Chemical Association, P.O. Box 1188,
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HAL BOZARTH

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c/o Burroughs Wellcome Company, 3030
Cornwallis Rd., Research Triangle Park, NC 27709

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Chemical Industry Committee, Tennessee
Association of Business, c/o Tennessee Eastman
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PAUL R. LAWLER

Chemical Industry Council of North Carolina,
P.O. Box 751, Raleigh, NC 27602

JOHN W. PAIGE

Chemical Industry Council of Associated
Industries of Kentucky, c/o Dow Corning
Corporation, P.O. Box 310, Carrollton, KY 41008

— continued



CHEMICAL INDUSTRY FEDERATION ADVISORY COUNCIL — continued

DAVID PATTI

Pennsylvania Chemical Industry Council, 212 N.
Third St., Lower Level 2, Harrisburg, PA 17101

A.D. RILEY

Louisiana Chemical Association, c/o Allied-Signal
Inc., P.O. Box 226, Geismar, LA 70734

G. DAVID SATTERFIELD

Chemical Industries Council of Illinois, 9801 W.
Higgins Rd., Suite 480, Rosemont, IL 60018

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Formosa Plastics Corporation, P.O. Box 320,
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Michigan Chemical Council, Capitol House, 320 W.
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NJ 07036

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Company, Inc., Cranberry Court, Suite 101, 212 N.
Third St., Harrisburg, PA 17101

PEGGY J. VINCE

Ohio Chemical Council, 17 S. High St., Suite 810,
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GEORGE A. VINCENT

Chemical Industries Council of Illinois, c/o The
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IL 60638

JACK E. WHITE

Chemical Industry Committee, West Virginia
Manufacturers Association, c/o American
Cyanamid Company, Polymer Products Div.,
Willow Island, WV 26190

HARRY P. WHITWORTH

Texas Chemical Council, 1402 Nueces, Austin, TX
78701-1534

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Chemical Industry Council of Delaware, c/o
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Suite 1010, Wilmington, DE 19801

LARRY F. WRIGHT

Texas Chemical Council, c/o Dow Chemical USA,
Texas Operations, APB Bldg., Freeport, TX 77541

CHEMICAL SE RESEARCH PO

PURPOSES: With respect to
Business Councils, the CHEM
in an advisory capacity for the

CHAIRMAN

EARNEST W. DEAVENPORT

VICE CHAIRMAN

ERNEST H. DREW

GERALDINE V. COX

Chemical Manufactu
N.W. Washington, D

EARNEST W. DEAVENPORT

Eastman Chemical C
Kingsport, TN 3766

ERNEST H. DREW

Hoechst Celanese C
North, Somerville,

CHEMICAL SELF-FUNDED TECHNICAL ADVOCACY AND RESEARCH POLICY COMMITTEE

PURPOSES: With respect to the CHEMSTAR panels and Business Councils, the CHEMSTAR Policy Committee will serve in an advisory capacity for the CMA Executive Committee and

Board of Directors to help ensure that all panels and councils are conducted in a manner consistent with Association policies and the CHEMSTAR Guidelines.

CHAIRMAN

EARNEST W. DEAVENPORT, JR.

STAFF EXECUTIVE

LANGLEY A. SPURLOCK

VICE CHAIRMAN

ERNEST H. DREW

GERALDINE V. COX

Chemical Manufacturers Association, 2501 M St.,
NW, Washington, DC 20037

GARY C. HERRMAN

Chemical Manufacturers Association, 2501 M St.,
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Chemical Manufacturers Association, 2501 M St.,
NW, Washington, DC 20037

ERNEST H. DREW

Hoechst Celanese Corporation, Route 202-206
North, Somerville, NJ 08876



RESPONSIBLE CARE COORDINATING GROUP

PURPOSES: With respect to monitoring and coordinating a Responsible Care workplan for the Association that is designed to ensure effective implementation of the initiative, the Coordinating Group will: define guidelines and recommend priorities for code development to the Board Public Perception Committee for Executive Committee and Board action; advise standing committees as they develop codes of management practices and assist them in moving the codes through the review process; define the member self-evaluation process;

support the executive leadership group program; and coordinate other features incorporated as the initiative is implemented. The Coordinating Group shall report to the Ad Hoc Board Public Perception Committee and through the Communications Department to the President. The Ad Hoc Board Public Perception Committee shall provide policy oversight for the group, as authorized and directed by the Executive Committee and Board of Directors.

CHAIRMAN

ERNEST F. RUPPE

DANIEL L. ASH

Rohm and Haas Kentucky, P.O. Box 32260,
Louisville, KY 40232

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Olin Corporation, P.O. Box 1355, Stamford, CT
06804-1355

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Exxon Chemical Americas, P.O. Box 4004,
Baytown, TX 77522-4004

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Union Carbide Corporation, 39 Old Ridgebury Rd.,
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ARCO Chemical Company, 3801 W. Chester Pike,
Newtown Square, PA 19073

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Rohm and Haas Company, Independence Mall
West, Philadelphia, PA 19105

PERCY R. KAVASMANECK

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O. EDWARD WALL

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TX 77210

BEN WOODHOUSE

Dow Chemical U.S.A., 2020 Willard H. Dow Center,
Midland, MI 48674



MEMBERS

A

Airco Gases, A Div
Ave., Murray Hill

Air Products and C
Blvd., Allentown

Akzo Chemicals In
Chicago, IL 606

Albright & Wilson
Richmond, VA 2

Albright & Wilson
Rd., (Toronto) Is
(416) 239-7111

Alcoa Coastal Chem
Suite 3160, Hou:

Allied-Signal Inc. -
07960 - (201) 48

American Cyanami
Plaza, Wayne, N

American Syntheti
Box 32960, Lou:

Amoco Chemical C
Chicago, IL 606

ANGUS Chemical C
Northbrook, IL

ARCO Chemical Co
Newtown Squar

Aristech Chemical
Pittsburgh, PA

Arizona Chemical
Highway 98, Pa
(904) 785-6700

Ashland Chemical
Oil, Inc. - P.O.
(614) 889-3333

MEMBERS

A

- Airco Gases, A Division of BOC** — 575 Mountain Ave., Murray Hill, NJ 07974 — (201) 464-8100
- Air Products and Chemicals, Inc.** — 7201 Hamilton Blvd., Allentown, PA 18195 — (215) 481-4911
- Akzo Chemicals Inc.** — 300 S. Riverside Plaza, Chicago, IL 60606 — (312) 906-7500
- Albright & Wilson Americas** — P.O. Box 26229, Richmond, VA 23260-6229 — (804) 752-6100
- Albright & Wilson Americas (Canada)** — 2 Gibbs Rd., (Toronto) Islington, ON, Canada M9B 1R1 — (416) 239-7111
- Alcoa Coastal Chemicals** — 1100 Louisiana St., Suite 3160, Houston, TX 77002 — (713) 658-9000
- Allied-Signal Inc.** — P.O. Box 3000R, Morristown, NJ 07960 — (201) 455-2000
- American Cyanamid Company** — One Cyanamid Plaza, Wayne, NJ 07470 — (201) 831-2000
- American Synthetic Rubber Corporation** — P.O. Box 32960, Louisville, KY 40232 — (502) 448-2761
- Amoco Chemical Company** — P.O. Box 87759, Chicago, IL 60680-0759 — (312) 856-3200
- ANGUS Chemical Company** — 2211 Sanders Rd., Northbrook, IL 60062 — (312) 498-6700
- ARCO Chemical Company** — 3801 W. Chester Pike, Newtown Square, PA 19073-2387 — (215) 359-2000
- Aristech Chemical Corporation** — 600 Grant St., Pittsburgh, PA 15230-0250 — (412) 433-2747
- Arizona Chemical Company** — 1001 E. Business Highway 98, Panama City, FL 32401 — (904) 785-6700
- Ashland Chemical Company, Division of Ashland Oil, Inc.** — P.O. Box 2219, Columbus, OH 43216 — (614) 889-3333

ATOCHEM North America, Inc. — Three Parkway, Philadelphia, PA 19102 — (215) 587-7000

Ausimont USA, Inc. — 44 Whippany Rd., Morristown, NJ 07962 — (201) 292-6250

B

- J. T. Baker Inc.** — 222 Red School Lane, Phillipsburg, NJ 08865 — (201) 859-2151
- BASF Corporation** — Eight Campus Dr., Parsippany, NJ 07054 — (201) 263-5821
- Bayer USA Inc.** — 500 Grant St., One Mellon Center, Pittsburgh, PA 15219-2502 — (412) 394-5500
- Betz Laboratories, Inc.** — 4636 Somerton Rd., Trevose, PA 19047 — (215) 355-3300
- Big Three Industries, Inc.** — P.O. Box 3047, Houston, TX 77253 — (713) 868-0333
- Borden Packaging and Industrial Products, Division of Borden, Inc.** — 180 E. Broad St., Columbus, OH 43215 — (614) 225-4000
- BP Chemicals, Inc.** — 200 Public Square, Cleveland, OH 44114-2375 — (216) 586-4141
- Buffalo Color Corporation** — 959 Route 46 East, Parsippany, NJ 07054 — (201) 316-5600
- Burris Chemical, Inc.** — P.O. Box 70788, Charleston, SC 29415 — (803) 554-7511

MEMBERS — continued

C

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02254-9073 — (617) 890-0200

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(609) 786-7900

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Cambrex Corporation — One Meadowlands Plaza,
East Rutherford, NJ 07073 — (201) 804-3000

**Carus Chemical Company, Division of Carus
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61301 — (815) 223-1500

Champlin Refining and Chemicals, Inc. — P.O. Box
160066, Irving, TX 75016-0066 — (214) 402-7000

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Chemical Products Corporation — P.O. Box 449,
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MO 63131-1000 — (314) 966-9968

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07024 — (201) 944-6020

CPS Chemical Company, Inc. — P.O. Box 162,
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Crompton & Knowles Corporation — One Station
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(203) 353-5400

Crosfield Chemicals, Inc. — 101 Ingalls Ave., Joliet,
IL 60435 — (815) 727-3651

D

Dakota Gasification Company — 1600 E. Interstate
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Degussa Corporation — 65 Challenger Rd.,
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Deltech Corporation — 550 Route 206, Bedminster,
NJ 07921 — (201) 781-1100

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Dixie Chemical Company, Inc. — P.O. Box 130410,
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Eastman Chemical C
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EM Industries, Inc. —
10532 — (914) 592-

Engelhard Corporati
33 Wood Ave. Sou
(201) 321-5000

Ethyl Corporation —
23217 — (804) 788-

Exxon Chemical Com
South. Darien, CT

F

Fairmount Chemical
Newark, NJ 07105 -

Ferro Corporation —
OH 44114-1183 — (2

Finis Oil and Chemicals
American Petrofi
Dallas, TX 75221 -

First Chemical Corpo
Jackson, MS 39205

Fisher Scientific Com
Pittsburgh, PA 152-

FMC Corporation — 2
60601 — (312) 861-

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OH 44114-1183 — (216) 641-8580

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60601 — (312) 861-6000

G

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GenCorp Polymer Products, Latex Operations —
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(216) 668-7000

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Grace Specialty Chemicals Co. — Grace Plaza,
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10036 — (212) 819-5500

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MEMBERS — continued

H

The C. P. Hall Company — 7300 S. Central Ave.,
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The Hall Chemical Company — 28960 Lakeland
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Haltermann, Inc. — 16717 Jacintoport Blvd., Houston,
TX 77015 — (713) 452-5951

Hanlia Group, Inc. — P.O. Box CN3106, Edison, NJ
08818 — (201) 225-4840

Harborchem — P.O. Box 377, Livingston, NJ 07039 —
(201) 535-6500

Harcros Chemicals Inc. — 205 N. Michigan Ave.,
Chicago, IL 60601 — (312) 856-0028

Hardman Incorporated — 600 Cortlandt St.,
Belleville, NJ 07109 — (201) 751-3000

Harwick Chemical Corporation — P.O. Box 9360,
Akron, OH 44305-0360 — (216) 798-9300

Hatco Chemical Corporation — King George Post
Rd., Fords, NJ 08863 — (201) 738-1000

Heinkel Corporation — 2200 Renaissance Blvd.,
Gulph Mills, PA 19406 — (215) 270-8100

Hercules Incorporated — Hercules Plaza, 1313 N.
Market St., Wilmington, DE 19894 —
(302) 594-5000

Hoechst Celanese Corporation — Route 202-206
North, Somerville, NJ 08876 — (201) 231-2000

Hoffmann-LaRoche Inc. — 340 Kingsland St., Nutley,
NJ 07110 — (201) 235-5000

Huls America Inc. — P.O. Box 456, Piscataway, NJ
08855-0456 — (201) 980-6965

Huntsman Chemical Corporation — 200 Eagle Gate
Tower, 60 East South Temple St., Salt Lake City,
UT 84111 — (801) 532-5200

I

ICI Americas Inc. — Concord Pike & New Murphy
Rd., Wilmington, DE 19897 — (302) 886-3000

ITT Rayonier Inc. — 1177 Summer St., Stamford, CT
06904 — (203) 348-7000

J

Johnson Matthey — P.O. Box 733, Valley Forge, PA
19482-0733 — (215) 971-3000

Jones-Hamilton Co. — P.O. Box 464, Newark, CA
94560 — (415) 797-2471

K

Kalama Chemical Inc. — 1110 Bank of California
Center, Seattle, WA 98164 — (206) 682-7890

Kao Corporation of America — 2711 Centerville Rd.,
Wilmington, DE 19808 — (302) 992-0188

Kerr-McGee Chemical Corporation — P.O. Box
25861, Oklahoma City, OK 73125 — (405) 270-1313

Kronos, Inc. — Rheox, Inc. — P.O. Box 700,
Hightstown, NJ 08520 — (609) 443-2000

L

Laporte Inc. — One V
28217 — (704) 522

LaRoche Chemicals,
Rouge, LA 70821

Laurel Industries, Inc.
Cleveland, OH 44

Eli Lilly and Company
307 E. McCarty St
(317) 276-2000

Liquid Carbonic Ind
Oak Brook, IL 60

Lonza Inc. — 17-17 Ro
(201) 794-2400

The Lubrizol Corpor
Wickliffe, OH 440

Lyondell Petrochemi
Houston, TX 7725

M

Mallinckrodt, Inc. —
63134 — (314) 895-

Marsulex Inc. — 111 C
ON, Canada M2H

McGean-Rohco, Inc. —
50 Public Square,
(216) 441-4900

Merck & Co., Inc. — F
07065 — (201) 574-

Merichem Company —
Houston, TX 7700

L

Laporte Inc. — One Woodlawn Green, Charlotte, NC
28217 — (704) 522-7663

LaRoche Chemicals, Inc. — P.O. Box 1031, Baton
Rouge, LA 70821 — (504) 356-8463

Laurel Industries, Inc. — 29525 Chagrin Blvd.,
Cleveland, OH 44122 — (216) 831-5747

Eli Lilly and Company — Lilly Corporate Center,
307 E. McCarty St., Indianapolis, IN 46285 —
(317) 276-2000

Liquid Carbonic Industries Inc. — 800 Jorie Blvd.,
Oak Brook, IL 60521 — (708) 572-7000

Lonza Inc. — 17-17 Route 208, Fair Lawn, NJ 07410 —
(201) 794-2400

The Lubrizol Corporation — 29400 Lakeland Blvd.,
Wickliffe, OH 44092 — (216) 943-4200

Lyondell Petrochemical Company — P.O. Box 3646,
Houston, TX 77253-3646 — (713) 652-7200

M

Mallinckrodt, Inc. — P.O. Box 5840, St. Louis, MO
63134 — (314) 895-2000

Marsulex Inc. — 111 Gordon Baker Rd., North York,
ON, Canada M2H 3R1 — (416) 496-9655

McGean-Rohco, Inc. — 1250 Terminal Tower,
50 Public Square, Cleveland, OH 44113-2251 —
(216) 441-4900

Merck & Co., Inc. — P.O. Box 2000, Rahway, NJ
07065 — (201) 574-4000

Merichem Company — 4800 Texas Commerce Tower,
Houston, TX 77002-3068 — (713) 224-3030

**Milliken Chemical, Division of Milliken &
Company** — P.O. Box 1927, Spartanburg, SC
29304 — (803) 573-2020

**Minnesota Mining and Manufacturing Company,
Chemical Division** — 3M Center, St. Paul, MN
55144-1000 — (612) 733-1110

**Mobil Chemical Company, A Division of Mobil
Corporation** — P.O. Box 10070, Stamford, CT
06904-2070 — (203) 328-7000

Monsanto Company — 800 N. Lindbergh Blvd.,
St. Louis, MO 63167 — (314) 694-1000

Mooney Chemicals, Inc. — 2301 Scranton Rd.,
Cleveland, OH 44113-9988 — (216) 781-8383

Morton International, Inc. — 110 N. Wacker Dr.,
Chicago, IL 60606-1560 — (312) 807-2000

MTM Chemicals — 8720 Red Oak Blvd., Suite 426,
Charlotte, NC 28217 — (704) 529-1575

N

Nalco Chemical Company — One Nalco Center,
Naperville, IL 60563-1198 — (708) 305-1000

National Starch and Chemical Corporation —
P.O. Box 6500, Bridgewater, NJ 08807 —
(201) 685-5000

Nepera, Inc. — Route 17, Harriman, NY 10926 —
(914) 782-1200

MEMBERS — continued

Neste Resins Corporation — P.O. Box 270,
Springfield, OR 97477 — (503) 687-8840

Neville Chemical Company — 2800 Neville Rd.,
Pittsburgh, PA 15225-1496 — (412) 331-4200

NOVA Corporation of Alberta — 201 N. Front St.,
Sarnia, ON, Canada N7T 7V1 — (519) 332-1212

Novacor Chemicals Ltd. — 801 Seventh Ave., SW,
Calgary, AB, Canada T2P 3P7 — (403) 290-8977

O

**Occidental Petroleum Corporation, Occidental
Chemical Corporation** — P.O. Box 809050,
Dallas, TX 75380 — (214) 404-3800

Olin Corporation — P.O. Box 1355, Stamford, CT
06904-1355 — (203) 356-2000

**OMI International Corporation/Ethone
Corporation** — 21441 Hoover Rd., Warren, MI
48089 — (313) 497-9100

Owens-Corning Fiberglas Corporation — Fiberglas
Tower, Toledo, OH 43659 — (419) 248-8000

P

Penick Corporation — 158 Mt. Olivet Ave., Newark,
NJ 07114 — (201) 621-2800

Peridot Chemicals (New Jersey), Inc. — 1333 Broad
St., Clifton, NJ 07015 — (201) 614-9300

Perstorp Polyols, Inc. — 600 Matzinger Rd., Toledo,
OH 43612 — (419) 729-5448

Petrolite Corporation — 100 N. Broadway, St. Louis,
MO 63102 — (314) 241-8370

Pfizer Inc. — 235 E. 42nd St., New York, NY
10017-5755 — (212) 573-2323

**Phillips 66 Company, A Subsidiary of Phillips
Petroleum Company** — Bartlesville, OK 74004 —
(918) 661-6600

PPG Industries, Inc., Chemicals Group — One PPG
Place, Pittsburgh, PA 15272 — (412) 434-3131

The PQ Corporation — P.O. Box 840, Valley Forge, PA
19482-0840 — (215) 293-7200

The Procter & Gamble Company — P.O. Box 599,
Cincinnati, OH 45217 — (513) 983-1100

PVS Chemicals, Inc. — 11001 Harper Ave., Detroit, MI
48213 — (313) 921-1200

Q

Quantum Chemical Corporation — 99 Park Ave.,
New York, NY 10016 — (212) 949-5000

R

Reichhold Chemicals, Inc. — P.O. Box 13582,
Research Triangle Park, NC 27709 —
(919) 544-9225

Reilly Industries, Inc. — 151 N. Delaware St.,
Indianapolis, IN 46204 — (317) 638-7531

Rhone-Poulenc Inc. — CN5266, Princeton, NJ
08543-5266 — (201) 297-0100

Rohm and Haas Co.
Philadelphia, PA

Rohm Tech Inc. — E
(617) 321-6984

Ruetgers-Nease Ch
201 Struble Rd.,
(814) 238-2424

S

Sandoz Corporation
NC 28205 — (70-

SCM Chemicals, In
21202 — (301) 78

Scott Polymers, In
TX 76111 — (817-

Shell Canada Chem
Shell Canada I
Dr., Don Mills, C
(416) 443-7111

Shell Chemical Co.
TX 77252 — (712

The Shepherd Che
St., Cincinnati,

Sherex Chemical C
Dublin, OH 430

Sloss Industries-C
Birmingham, Al

Solkatronic Chem
Fairfield, NJ 07

Solvay America, I
77227 — (713) 5.

Rohm and Haas Company — Independence Mall West,
Philadelphia, PA 19105 — (215) 592-3000

Rohm Tech Inc. — 195 Canal St., Malden, MA 02148 —
(617) 321-6984

Ruetgers-Nease Chemical Company, Inc. —
201 Struble Rd., State College, PA 16801 —
(814) 238-2424

S

Sandoz Corporation — 4000 Monroe Rd., Charlotte
NC 28205 — (704) 331-7087

SCM Chemicals, Inc. — 7 St. Paul St., Baltimore, MD
21202 — (301) 783-1120

Scott Polymers, Inc. — 3607 N. Sylvania, Fort Worth,
TX 76111 — (817) 831-3531

**Shell Canada Chemical Company, Division of
Shell Canada Products Limited** — 75 Wynford
Dr., Don Mills, ON, Canada M3C 2Z4 —
(416) 443-7111

Shell Chemical Company — P.O. Box 2463, Houston,
TX 77252 — (713) 241-6161

The Shepherd Chemical Company — 4900 Beech
St., Cincinnati, OH 45212 — (513) 731-1110

Sherex Chemical Company, Inc. — P.O. Box 646,
Dublin, OH 43017 — (614) 764-6500

Sloss Industries Corporation — P.O. Box 5327,
Birmingham, AL 35207 — (205) 254-7805

Solkatronic Chemicals Inc. — 30 Two Bridges Rd.,
Fairfield, NJ 07006 — (201) 882-7900

Solvay America, Inc. — P.O. Box 27328, Houston, TX
77227 — (713) 526-2000

**Spectrum Chemical Manufacturing
Corporation** — 14422 S. San Pedro St., Gardena,
CA 90248 — (213) 516-8000

Standard Chlorine Chemical Co., Inc. — 1035
Belleville Turnpike, Kearny, NJ 07032 —
(201) 997-1700

Stapan Company — 22 W. Frontage Rd., Northfield, IL
60093 — (708) 446-7500

Sterling Chemicals, Inc. — 333 Clay St., Suite 3700,
Houston, TX 77002 — (713) 650-3700

**Sun Refining and Marketing Company, Chemicals
Division** — Ten Penn Center, 1801 Market St.,
Philadelphia, PA 19103-1699 — (215) 977-3000

Syntex Chemicals, Inc. — 2075 N. 55th St., Boulder,
CO 80301 — (303) 442-1926

T

**Texaco Chemical Company, Subsidiary of Texaco
Inc.** — P.O. Box 27707, Houston, TX 77227-7707 —
(713) 961-3711

Texas Brine Corporation — 2000 West Loop South,
Suite 990, Houston, TX 77027 — (713) 877-2700

Texas Petrochemicals Corporation — 8707 Katy
Freeway, Suite 300, Houston, TX 77024 —
(713) 461-2223

Tioxide Canada Inc. — P.O. Box 580, Sorel, PQ,
Canada J3P 5P8 — (514) 742-2711



UOP — Box 5017, Des Plaines, IL 60017-5017 —
(312) 391-2000

Vulcan Chemicals, A Division of Vulcan Materials Company — P.O. Box 7689, Birmingham, AL 35253 — (205) 877-3000

Witco Corporation — 520 Madison Ave., New York,
NY 10022-4236 — (212) 605-3800

Zeon Chemicals USA, Inc. — 4100 Bells Lane,
Louisville, KY 40232 — (502) 772-5820

3. Organization

GENERAL PRINCIPLES APPLICABLE TO THE STRUCTURE AND OPERATION OF COMMITTEES*

Preamble. The Association's Bylaws, in Article V, Section 8, authorize the Board of Directors or the Executive Committee to appoint such committees with such duties and functions as may from time to time be determined. The Bylaws further permit adoption of regulations for the conduct of committee affairs consistent with Association policy and subject to review and approval by the Board or Executive Committee as appropriate.

To assist the committees in carrying out their functions consistent with the Bylaws, certain general principles applicable to the structure and operation of all committees are formalized in this Resolution. No committee or other group operating under CMA auspices on CMA business shall deviate from these general principles, except where specifically authorized by the Executive Committee or the Board (or as determined to be necessary by the President or Secretary of the Association).

As used in this Resolution, unless otherwise indicated, the term "committee" includes all CMA standing committees and such special committees as may be authorized from time to time, but does not include the Executive Committee or other committees composed of members of the Board.

1. Functional vs. Product Committees. The Association's committees shall continue to be organized primarily along functional rather than product lines. No committee having to do with a particular chemical product or product segment shall be formed without approval of the Board (or in an emergency by the President of the Association). Before agreeing to the establishment of any such committee, the Executive Committee shall determine whether the existing committees are adequate to handle the problem, and if not, whether the problem is of such general concern as to call for a new standing or special committee. All committees dealing with a particular product segment of the industry and all other committees for a temporary purpose shall be deemed ad hoc. Unless otherwise specified, the term of such committee shall be no longer than two years, subject to renewal for periods of one year or less by specific action of the Board.

2. Purposes. Each committee shall operate in accordance with PURPOSES setting forth its authorized activities which have been approved by the Executive Committee. Each committee's PURPOSES shall be printed in the Association's annual Directory.

3. Organization. All committees shall, unless other-

wise authorized, be subject to the following rules in respect to their organization:

(a) **Members.** Each committee normally shall be limited to not more than 15 members. The members shall be recommended by the President of the Association and appointed by the Executive Committee from qualified full time personnel of member companies interested in supporting such activities. To the maximum extent practicable, appointments should be reasonably representative of all interested member companies, taking into account such factors as their size, geographical location, chemicals manufactured, and differences in the general nature of their operations. Normally, a member company may have only one representative on a given committee. Members of any necessary task groups shall be appointed by the committee on the same basis. The membership of each committee should be comprised of persons well qualified in the committee's field of activity, normally having primary responsibilities within that field in their respective companies. Nomination for committee membership will be made by member company Executive Contacts and shall include name, company affiliation and personal title, background relevant to committee's field of activity, and description of responsibilities within the company. A committee may nominate for consideration by the President or Executive Committee one or more associate members representing governmental bodies or scientific trade associations where such representation on a continuing basis will facilitate significantly the committee's programs. Associate members shall have non-voting status and be subject to review and Executive Committee confirmation annually.

(b) **Task Groups.** A committee may form such task groups as may be necessary to assist it in conducting its authorized activities. The Executive Committee shall be promptly advised of the formation of each such task group, and terms of reference in each case shall be established in writing by the parent committee subject to the review and approval by CMA staff and the President of the Association.

*As approved by the Board of Directors on March 12, 1963, and amended by the Executive Committee on March 19, 1971; July 11, 1978, and June 3, 1981.

(c) **Officers.** The chairman of each committee to serve as its chief executive officer, and a vice chairman, shall be appointed annually by the Executive Committee. The heads of task groups shall be appointed by the respective chairmen with committee approval.

(d) **Rotation.** The term of individual committee members shall be three years, one third of the membership being rotated annually. Initial committee membership terms will be scaled to accommodate this rotation. Upon the expiration of one term of committee membership, a waiting period of at least one year must lapse before a former member becomes eligible for reappointment. For this purpose, a term will be regarded as three years or any fraction thereof according to the member's latest appointment to that committee. A committee member appointed chairman in the third year of his committee tenure may be appointed to a second year as chairman in which case he would serve in this post outside of the member limit on committee membership. A chairman cannot be extended in this manner for more than one additional year.

(e) **Staff Executive and Committee Secretary.** Each committee shall have as its staff executive and secretary a full time CMA staff employee who shall function as the Board's administrative representative for such committee and as its chief administrative officer. It shall be the staff executive's duty and responsibility to see that all operations and proceedings of the committee, and of all its task groups, are conducted in full conformity with their purposes and this Resolution, consulting with General Counsel as necessary. On all procedural questions arising within any committee, including matters related to established Association policy, the staff executive's decision shall be accepted, pending appropriate review.

4. Meetings. The business of each committee shall be conducted in executive sessions attended by its members and by others who have a leading role in matters to be considered at the particular meeting. Each task group meeting shall be an executive session of assigned members of the task group plus any members of the parent committee who wish to be present.

(a) **Frequency.** Each committee and task group will meet only as necessary to perform authorized committee business as determined by the chairman in consultation with the CMA staff. Meetings should not be held where subject matter can be adequately and practicably handled by corre-

spondence or telephone between the appropriate staff executive and individual members.

(b) **Location.** To the extent practicable and in the absence of cogent reasons for being elsewhere, all committee and task group meetings should be held in Washington, D.C., preferably at the Association's office. Other locations, such as major city airports, may be considered in instances when they would afford greater convenience and cost savings to attendees.

(c) **Agenda.** Following consultation with the committee chairman, the staff executive assigned to each committee shall prepare written agenda prior to each of its meetings, which agenda shall be cleared in advance with General Counsel.

(d) **Attendance of Staff Executive.** No CMA committee meeting shall be held without the attendance of the staff executive assigned to it or other full time CMA staff employee. General Counsel or his designate should also attend any meeting whenever in his option the nature of any subject on the agenda makes his presence desirable.

(e) **Minutes.** The staff executive assigned as secretary to the committee shall keep accurate and complete minutes of all business transacted at each meeting, which are to be subject to review and approval by General Counsel.

(f) **Discussions Limited to Agenda.** All substantive discussions at any CMA committee meeting are to be limited to authorized aspects of subjects on the agenda, except where additions to the agenda are specifically approved by the staff executive assigned to the committee. The staff executive's decision as to the propriety of any subject matter raised for discussion at any meeting shall be accepted, pending appropriate review. Any discussions or occurrences on the occasion of any meeting which are contrary to CMA's policies or rules and which have come to the staff executive's attention shall be reported promptly by him to his supervisor and to General Counsel.

(g) **Task Groups.** The foregoing rules on meetings are applicable to all committees, task groups, and any other working groups, and any other working groups meeting under CMA auspices, except that subparagraphs (c), (d), and (e) may be modified as indicated below in those cases where the group must meet in order to carry out a limited and specific written assignment from the parent committee and it is impractical for a staff executive to be present. In each such case, (i) the specific assignment must be set forth in the parent

committee's minutes assigned as secretary and that the require staff presence group is to be reviewed of the CMA especially those specifically and (iv) the chairman rate and complete mittee and to the thing occurring

(h) **Camera sessions.** each committee shall have at least two per year tive Contacts within the membership and other interested companies may

committee's minutes: (ii) the CMA staff executive assigned as secretary to the parent committee must be satisfied that the meeting in question is necessary and that the subject matter is not such as to require staff presence, (iii) the chairman of the group is to be responsible for carrying out the duties of the CMA staff executive, including particularly those specified in subparagraph (f) above; and (iv) the chairman must promptly make an accurate and complete written report to the parent committee and to the CMA staff executive as to everything occurring at such meeting.

(h) **General Meetings.** Apart from executive sessions, each committee shall schedule meetings, at least two per year, to which designees of Executive Contacts whose companies are not represented in the membership of the committee shall be invited and other interested representatives of member companies may attend. Such meetings shall be

scheduled and notices issued amply in advance as often as appropriate to keep the designees and others informed about the committee's activities and provide opportunities for offering suggestions.

5. Policy Statements. Statements of Association policy or position developed by any CMA committee or other group for submission to the Congress or any governmental or other external agency shall, unless otherwise authorized, be transmitted by the President or other appropriate officer of the Association.

6. Reports. An account of the significant program activities of each committee shall appear in the Annual Report of the Association. The President and Executive Committee shall be kept informed on a current basis by communication from the chairman and the assigned staff executive. Presentation of reports to the Board shall be made as determined by the Executive Committee.

7. Periodic Reminder to Committee Members. A copy of this Resolution, as it may be amended from time to time, shall be furnished to each member of each CMA committee and task group thereof at the beginning of his duties as a member, and at least once a year thereafter so long as he remains a member.

RULES OF PROCEDURE FOR COMMITTEES*

1. **Purposes.** The purpose of each committee shall be as set forth in the CMA Directory.
2. **Membership.** Nominees, in addition to competence in the subject area, should have the perspective to recognize which matters are truly significant to the chemical industry, and have the talents and personal inclination to be dynamic workers. The nominee's position in the company should provide ready access to the Executive Contact so as to authoritatively reflect corporate views and also assure company backing in devoting a considerable portion of time and associated company resources to committee activities.
3. **Officers**
 - 3.1 The officers of a committee will be a chairman and a vice chairman.
 - 3.2 The officers will serve for a term of one year commencing June 1.
 - 3.3 **Chairman**
 - 3.3.1 The chairman will preside at meetings and exercise general supervision over affairs of the committee within the general framework of CMA policies.
 - 3.3.2 The chairman will be responsible for full reporting at regular meetings of all committee activities not previously reported.
 - 3.3.3 The chairman will familiarize the vice chairman with all the functions of the chairman in order to provide for proper and effective continuity in the chairman's absence.
 - 3.3.4 With the concurrence of the committee, the chairman may establish task groups, define their purpose and scope, appoint their membership, and designate the chairman.
 - 3.3.5 The chairman will designate from the membership of the committee liaison assignments to various CMA standing committees and task groups as necessary.
 - 3.4 **Vice Chairman**

In the absence of the chairman, the vice chairman shall fulfill all the functions of the chairman.
4. **Secretary/Staff Executive**
 - 4.1 The secretary shall be the CMA staff executive assigned to the committee.
 - 4.2 The staff executive shall exercise those authorities and responsibilities prescribed by the "General Principles Applicable to the Structure and Operations of Committees."
 - 4.3 The staff executive shall prepare and distribute notices of meetings, agenda, and minutes, and have custody of the official records of the committee.
5. **Meetings**
 - 5.1 Meetings of the committee will be held at the call of the chairman.
 - 5.2 A majority of the committee members shall constitute a quorum at any meeting.
 - 5.3 Task groups shall arrange separate meetings as justified by their assignment, subject to call by their respective chairmen and advance notice to the members from the staff executive.
 - 5.4 The staff executive shall issue advance notices for all meetings of the committee and task groups, and no meeting may be held in the absence thereof.
 - 5.5 It shall be the responsibility of the chairman of a task group to submit a timely request to the staff executive concerning any desired modifications of subparagraphs 4(c), (d), or (e) of the "General Principles Applicable to the Structure and Operations of Committees" under the provisions of subparagraph 4(g).
 - 5.6 Actions shall be decided by a majority of members present. The presiding officer may vote to break a tie. The staff executive is not entitled to vote.
6. **Task Groups**
 - 6.1 Designations of task groups for special assignments, as to their membership, purpose, and scope shall be recorded in committee minutes. All task groups shall be reviewed annually by the committee. Unless recommended for continuance by the committee and authorized by the President of the Association they terminate.
 - 6.2 Committee membership is not a prerequisite to serving on task groups.

*As approved by the Executive Committee on July 11, 1978 and amended by the Executive Committee June 3, 1981.

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- 6.3 The chairman and vice chairman shall be ex officio members of all task groups and shall be furnished notices of their meetings. They, together with the staff executive, shall be furnished copies of all reports and correspondence pertaining to task group activities.
 - 6.4 Task group chairmen shall be responsible for keeping their members informed regarding progress of activities and assigned tasks.
 - 6.5 Task group chairmen shall furnish written reports to the committee chairman, vice chairman and staff executive in advance of each regular meeting of the committee concerning activities, plans and recommendations.
 - 6.6 The term "task group" as used in these rules is defined to include any other committee sub-units.

7. Administration

- 7.1 The committee may consider matters from any source provided they fall within the scope of the declared PURPOSES.
- 7.2 An agenda of matters to be considered at meetings shall be prepared and furnished to those involved, at least one week in advance whenever practicable.

- 7.3 Minutes of meetings shall be prepared and distributed promptly. Corrections or additions shall be considered at the next meeting. In addition to normal distribution, such minutes shall be furnished to other member company representatives designated by their Executive Contact to receive them.
- 7.4 Voting may be conducted by letter ballot when, in the judgement of the staff executive, circumstances warrant.
- 7.5 Appearance before any legislative or regulatory body or other organization on CMA's behalf shall be made only as officially authorized. If, in any such appearance other than as a duly authorized representative, a person identifies himself with CMA in any way, he shall also make clear that he is not representing CMA in such participation.

8. Legal Assistance. Requests for legal assistance shall be directed by the committee chairman or staff executive to the CMA General Counsel. Assistance of the General Counsel, staff counsel, or member company will normally be provided. Outside counsel, if required, will be selected and supervised by the General Counsel and will be engaged only after approval by the President or Executive Committee.

9. Primary Requirement. These rules are designed to supplement CMA's "General Principles Applicable to the Structure and Operations of Committees," originally approved March 12, 1963, as subsequently amended. Nothing in these rules shall be interpreted or applied in such manner as to conflict with that document.

ANTITRUST GUIDE FOR CMA COMMITTEE MEMBERS

This is designed to be a layman's guide on how the antitrust laws apply to trade association activities, with particular reference to CMA committee work. It is written for both the guidance of those committee members who have no particular knowledge of this complicated subject, and to provide a useful reminder or "refresher course" for those who have had the benefit of antitrust advice from their own company counsel.

The Chemical Manufacturers Association is a non-profit industry association representing about 180 chemical producers. Like other industry associations, CMA is composed of member companies (many of whom are competitors of one another) representatives of which serve on its Board of Directors and on its committees.

Whenever competitors meet together problems can arise under the antitrust laws. If the meeting or other activities among competitors is conducted by or through a trade association, it is just as vulnerable to antitrust attack as if the same companies were meeting or acting together without the medium of an association. Trade associations generally seek, quite properly, to promote understanding and cooperation among their members. But if this "cooperation" restrains competition, both the association and its members will be in trouble under the antitrust laws.

Antitrust enforcement is being emphasized as never before. The number of criminal and civil antitrust actions is steadily increasing. Congress has greatly increased both criminal and civil antitrust penalties, has made important procedural changes, and has substantially increased the budgets for the Antitrust Division of the Department of Justice and the Federal Trade Commission, the two agencies charged with antitrust enforcement. The courts are expanding the scope of antitrust prohibitions which may especially affect trade association activities, and such associations are more frequently becoming the objects of FTC and Antitrust Division investigations. In view of these developments, increased awareness of the applications of the antitrust laws to association activities is essential.

Like most reputable trade associations, CMA has objectives and programs that are well within the law. It also makes every effort to prevent possible antitrust abuses from arising. But a large responsibility also rests upon its member companies — and particularly upon their individual representatives who serve on CMA committees. This means that committee members should know enough about this subject to be able, in their

CMA work, to avoid actions or discussions that might raise antitrust questions. The main purpose of this guide is to help all committee members to recognize what is, or might become, an "antitrust question."

Some actions or discussions by members of a trade associations are clearly illegal; many others are wholly legal and proper; and there is a sizeable "grey area" or danger zone in between. This grey area between legal and illegal association activity is often vague and uncertain, and CMA's policy has always been to keep far away from the doubtful zones.

The Association's aim is not only to avoid actual violations of the law — it wants to prevent even any appearance of violation which might invite suspicion or investigation on the part of the enforcement authorities. To protect itself and its members in this respect, CMA has adopted and observes several basic policies:

1. It has well-defined, constructive objectives and programs which are designed to promote the overall interest of the industry and the public.
2. Its organizational structure consists primarily of standing committees with specific and limited functional purposes; and activities concerned with pricing or marketing chemical products are scrupulously avoided, and limitations are also imposed of the subject matter and duration of "ad hoc" committees dealing with specific chemical products or product segments.
3. It maintains various procedural safeguards particularly those set forth in the "General Principles Applicable to the Structure and Operation of Committees" which appears in the Association's annual Directory.
4. It retains counsel to help insure full observance of the above policies and procedures, and to provide guidance and protective advice as to all CMA operations from an antitrust standpoint.

THE FEDERAL

Beginning in 1890, Congress enacted antitrust statutes which are known as the Sherman and Clayton trust laws. These laws serve our competitive policy by encouraging free and open competition. The federal antitrust laws are based on a philosophy underlying that a free market in which the forces of supply and demand determine the conditions of distribution and sale, and that each dealer deals independently, securing a fair and equitable allocation of high quality goods at the lowest possible prices.

The central core of federal antitrust law is formed by the Sherman and Federal Trade Commission Acts. The Sherman Act also enacted antitrust laws but no attempt is made to define the term "restraint of trade" in the manual. Similarly, there are no definitions of the areas of federal antitrust law. The Sherman Act and many parts of the Federal Trade Commission Act bear directly on the act but are usually not involved in the primary focus here. The primary focus here is on the Sherman Act involving relationships between competitors, and between a company and its customers.

Section 1 of the Sherman Act prohibits "combinations" or "conspiracies" in restraint of commerce. These are to be understood by two or more persons, by agreement or understanding, oral, formal or informal. Because of the nature of the act, the Sherman Act is a weapon used by the Department of Justice in suits against trade associations. Suits are usually based on the Sherman Act, the Federal Trade Commission Act, or the Clayton Act. The Sherman Act is a trade association activity which is prohibited under Section 1 of the Sherman Act which prohibits "combinations" or "conspiracies" in restraint of competition.")

Although the language of the Sherman Act is deliberately general in

THE FEDERAL ANTITRUST LAWS

Beginning in 1890, Congress has enacted a series of statutes which are known collectively as the federal antitrust laws. These laws are designed to promote and preserve our competitive private enterprise system by encouraging free and open competition in open markets. The federal antitrust laws give the force of law to the philosophy underlying our economic system, namely, that a free market in which supply and demand operate to determine the conditions and terms of production, distribution and sale, and where each seller and a buyer deals independently, serves to achieve the most equitable allocation of high quality goods and services at the lowest possible prices.

The central core of federal antitrust legislation is formed by the Sherman Act (1890) and the Clayton and Federal Trade Commission Acts (1914). Most states have also enacted antitrust laws similar to the federal statutes but no attempt is made to discuss them in this brief manual. Similarly, there is no discussion herein of other areas of federal antitrust law (such as the Robinson-Patman Act and many parts of the Clayton Act) which may bear directly on the activities of individual companies but are usually not involved in association activities. The primary focus here is on horizontal conduct "i.e.," involving relationships between competitors, rather than vertical relationships such as those between a company and its customers.

Section 1 of the Sherman Act prohibits "contracts," "combinations" or "conspiracies" in restraint of trade or commerce. These are terms of collective action or conduct by two or more persons, and they include agreements and understandings of all kinds, whether written or oral, formal or informal, which unduly restrain competition. Because of the collective nature of most trade associations' activities, this section is the principal weapon used by the Department of Justice in antitrust suits against trade associations or their members. Such suits are usually based upon an alleged conspiracy or agreement among competitors to restrain trade. (The Federal Trade Commission also can, and does, challenge trade association activity which is alleged to lessen competition under Section 5 of the Federal Trade Commission Act which prohibits "unfair methods of competition.")

Although the language of the antitrust statutes is deliberately general in its coverage, prohibiting "(every)

contract, combination or conspiracy in restraint of trade" and "unfair methods of competition," the courts have defined a number of specific activities as inherently unlawful, the so-called "per se" offenses (see "Prohibited Activities," *infr.*). The legality of other activities is determined by the "rule of reason," i.e., whether the activity is ancillary to the achievement of a legitimate business objective and is no more restrictive of competition than necessary to achieve that objective. Although this necessarily involves difficult questions of interpretation, even here useful guidelines for antitrust compliance have evolved from the courts' decisions. The importance of obtaining legal counsel in any area of uncertainty cannot be overemphasized, for the sanctions imposed for violations of the antitrust laws are severe.

ANTITRUST ENFORCEMENT

The federal antitrust laws are enforced by the Department of Justice (Antitrust Division) and the Federal Trade Commission and frequently provide the basis for suits by private parties.

All of the following penalties can be imposed for violations of antitrust laws.

1. IMPRISONMENT. Violations which are criminal offenses, including most prohibited collusive activities, are felonies. The Federal Sentencing Guidelines, which became effective in November, 1987, establish a minimum jail term of 4 to 10 months for first offenders. In addition, the minimum recommended sentence under the Guidelines is increased as the volume of commerce in question increases. For example, if the offense involved a volume of commerce greater than \$50,000,000, the minimum sentence would be increased to 10 to 16 months. Prison sentences are increasingly common, and convicted felons may be denied citizenship, voting and other privileges.

2. FINES. Minimum fines of \$20,000 for individuals, and \$100,000 for corporations, are required under the Sentencing Guidelines. However, the permissible range of fines for an individual is 4 to 10 percent of the volume of commerce; the range for an organization is from 20 to 50 percent of the volume of commerce affected. Assuming a corporation is found to have violated the antitrust laws, affecting \$50,000,000 of commerce, the permissible fine would range from \$10,000,000 to \$25,000,000! An individual may not be reimbursed by his corporation for fines paid by him and fines are not deductible for income tax purposes.

3. INJUNCTIVE COURT AND FEDERAL TRADE COMMISSION ORDERS. Orders (injunctions) which prohibit future violations or activities can be imposed as a result of civil action brought by the Department of Justice, the Federal Trade Commission, or private parties, with far-reaching consequences. Such injunctions may contain sweeping prohibitions which go well beyond the scope of the violations charged and prohibit conduct which is not itself considered contrary to the antitrust laws. Such orders can seriously limit freedom of corporate or association action, require burdensome and time consuming reporting obligations, cause day-to-day activities to be supervised by a court or agency, and even require dissolution of a trade association. Violation of an injunctive order issued by a court can result in contempt proceedings with attendant fines, while failure to comply with an injunction ("cease and desist order") issued by the Federal Trade Commission carries penalties of up to \$10,000 for each day the non-compliance continues.

4. TREBLE DAMAGES. A sanction which has been applied with increasing frequency as private antitrust suits have rapidly increased in recent years is the "treble damage" provision of the antitrust laws which allows persons or businesses injured by an antitrust violation to recover three times the amount of actual damages sustained. Such cases have resulted in hundreds of millions of dollars of damages being paid to private litigants. Thus, an antitrust violation could impair the financial resources of any corporation and significantly weaken its competitive position.

PROHIBITED ACTIVITIES

As noted above, many antitrust violations — and particularly those involving trade associations — result from concerted or collusive activity, that is, from an "agreement" between or among competitors which result in a restraint of trade. An illegal agreement may be proved in a number of ways. It need not be written, and seldom is. Rather, the term "agreement" in antitrust parlance may mean no more than knowing adherence to or a participation in a common scheme. Explicit promises, commitments, or assurances are not necessary to establish a violation, nor must the parties actually carry out the agreement. (This definition of "agreement" is assumed throughout).

Convictions for collusive activities can be based on a series of seemingly isolated facts which have been linked to present a chain of circumstantial evidence from which an agreement or conspiracy — a meeting of the minds — can be inferred; for example, identical price increases by competitors following shortly after a trade association meeting at which "business conditions" and the need of the industry for higher prices were discussed. For this reason it is important when participating in CMA committee work or other association activities, which involve contact with other members of the industry, to avoid doing or saying anything which might even give an appearance of agreement with others in areas which may involve a lessening of competition.

(a) Agreements Involving Prices. Pricing is the most sensitive subject under the antitrust laws. "Price" in this context includes all the elements of the terms of sale: sales prices, discounts, allowances, freight, credit terms, container deposits, and all other services or conditions integrally related to a sale. Any agreement between competitors which fixes, stabilizes, maintains, bolsters, depresses, or tampers in any way with price is unlawful "per se," that is, the activity is indefensible and illegal without further analysis of its reasonableness, good intentions, arguable benefits to the public, or extenuating circumstances. In short there is no defense.

"Price-fixing" encompasses not only agreements with competitors on a selling price. It may also include, for example, agreement to buy up surplus goods, to adhere to a formula for determining prices, to standardize discounts, to control raw material prices, and any other agreement which has the net result of affecting the price structure of a given product. Moreover, it is just as unlawful for competitors to agree on the prices at which they will offer to buy from their suppliers, as on those at which they sell. As previously noted, an agreement can be shown in a number of ways. Thus, even the mere exchange of price lists between competitors serves as evidence of an illegal price-fixing agreement.

The essential rule is that each seller must determine on its own the prices at which it purchases and sells. To avoid inferences of agreement or collusion — and there can be no exceptions — CMA members must

not engage in any discussions with competitors regarding other marketing policies. The following are a few examples of price-fixing which have been found by courts to be illegal.

1. Some superstores violated the Sherman Act. One included a trade association. A participant made remarks to stop passing low prices to consumers and keep prices high. Viewing this and other pricing practices, the attendees at the meeting were gaged in an illegal price-fixing. A low and retail price verdict for over 32 attorneys' fees.)

2. In another case, a company in a market with other major companies which he described as competitors and changing prices. He openly agreed to reduce his discount schedule, however, the leading company proposed at the meeting by one, adopted the discount schedules. Managers were convicted of conspiracy. The fact was that the meeting frequently reclassified discount schedules had unlawfully con-

3. Sales officials of manufacturers in the same industry, seasonally calling each other to discuss specific and current prices. The Supreme Court held that the effect of stabilizing prices and reducing price reductions was to reach the calls did not result. Rather, each defense

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not engage in any direct or indirect discussions with any competitors regarding prices, pricing policies, or any other marketing policy which may affect pricing. The following are a few examples of activities which have been found by courts to constitute evidence of illegal price-fixing.

1. Some supermarket executives were held to have violated the Sherman Act on the basis of evidence which included a trade association meeting where one participant made remarks to the general effect that it was time to stop passing lower wholesale meat prices on to the consumers and keep some or it for themselves. After viewing this and other evidence in light of the article pricing practices, the court upheld a jury verdict that the attendees at the trade association meeting had engaged in an illegal conspiracy to keep wholesale prices low and retail prices high. (The jury awarded plaintiffs a verdict for over 32 million dollars, plus the plaintiffs' attorneys' fees.)

2. In another case, the sales manager of the leading company in a market invited the sales managers of the other major companies in the market to a meeting at which he described a proposal for reclassifying distributors and changing discount schedules. No one present openly agreed to reclassify his distributors and change his discount schedules. Subsequent to the meeting, however, the leading company instituted the changes proposed at the meeting and the other companies, one by one, adopted the same distributor classifications and discount schedules. All of the companies and their sales managers were convicted of engaging in an unlawful conspiracy. The fact that all of the individual defendants were at the meeting, heard the discussion, and subsequently reclassified their distributors and changed their discount schedules, supported a jury finding that they had unlawfully conspired to fix prices.

3. Sales officials of corrugated cardboard box manufacturers in the Southeast followed a practice of occasionally calling each other to determine quotes given on specific and current sales to identified customers. The Supreme Court held the practice illegal because it had the effect of stabilizing prices (i.e., it tended to limit price reductions and the range of price changes). The decision was reached in spite of an express finding that the calls did not result in an actual agreement on prices. Rather, each defendant, on receiving a request for pricing

information, usually furnished the data with the expectation that reciprocal information would be furnished to him. This simple exchange of information was held to establish an unlawful combination conspiracy under the Sherman Act.

(b) Agreements to Control Production or Sales. Competitors may not agree to limit or control production or sales. Any limitations on output by direct or indirect agreement are illegal per se and cannot be justified, even where the purpose is to preserve the industry or conserve natural resources.

(c) Division of Territories and Allocation of Customers. Any agreement between competitors to divide or allocate either sales territories or customers is unlawful per se. Exchanges of information with competitors relating to customers or territories can create the appearance such collusion or agreement and must be strictly avoided.

(d) Refusals to Deal. Any agreement among competitors which results in a refusal to deal with suppliers or other competitors — for example, a blacklist or boycott — is illegal per se. For this reason exchanges of information (e.g. credit information) concerning particular customers which might lead to parallel decisions not to deal should be avoided.

Application of Antitrust Laws to Trade Association Activities

The valuable and proper activities of CMA and its committees can be accomplished effectively if participating members are alert to the prohibited types of behavior described above and react quickly when danger signals appear.

Obviously, CMA activities should be conducted in such a way as to avoid any possible inference of agreement among its members with respect to prices, controlling production or sales, division of territories, or refusals to deal in any form whatsoever. Further guidelines are given here to highlight potential danger zones to be avoided. When a danger zone appears, counsel should be consulted for specific guidance.

In reviewing the following guidelines there are a few general points you should bear in mind:

1. As indicated above, an otherwise lawful act may become unlawful if done for an improper purpose, or if it is part of a larger standardization

program might be justifiable considered by itself, but not if it is combined with other activities to facilitate the fixing of uniform prices. In other words, the courts may look at the cumulative effect of several activities — not at each one separately.

2. Good motives are not an excuse for doing things that are otherwise unlawful, either because they fall within one of the "per se" categories discussed previously or because they are more restrictive of competition than necessary to accomplish their legitimate objectives. Thus even though a product standardization program may be intended to increase competition by providing consumers with important information, it may nevertheless be found unlawful if conducted in a manner more restrictive than necessary to achieve its legitimate purpose.

3. An ostensibly lawful program or activity runs a greater risk of getting into vulnerable areas if conducted by a group of competitors making the same product. That is the main reason why CMA operates primarily through functional committees, and imposes limitations on the subject matter and duration of any "ad hoc" committees dealing with matters concerning a specific chemical product or product segment.

4. As a member of a CMA committee, you and your company can be held responsible for any improper acts that may occur which you know about (or should know about), and if you fail to protest or disassociate yourself from them.

Participation in CMA Committee Meetings

All meetings of CMA committees must be conducted in strict compliance with the procedures set out in the "General Principles Applicable to the Structure and Operations of Committees."* These General Principles provide for agendas, attendance of staff representatives, and for the keeping of accurate and complete minutes — all of which are designed to avoid antitrust risks.

If you participate in a CMA task group meeting held without a staff member being present (pursuant to the special circumstances set for in subparagraph 4(g) of the General Principles), be sure that the meeting com-

plies with the requirements of that subparagraph 4(g) including an "accurate and complete written report . . . as to everything occurring at such meeting."

Note: The attitude of enforcement personnel will be governed by what committee or task group members actually do, not by what is said in reports or minutes that may be incomplete or inaccurate.

CMA committee members participating in activities involving advocacy before governmental entities should be familiar with and carefully observe the guidelines set out in the memorandum "General Principles and Guidelines for MCA Advocacy" dated May 14, 1975. In general, advocacy should be conducted in lawful ways and directed solely at efforts to influence that policy. It should not be used as a sham or as a means to affect competition directly and independently of what would be the effect of the government policy which is sought to be influenced.

While committee agendas will have been cleared in advance with CMA counsel, it is the obligation of all committee members to make sure that their own participation in committee meetings will not give rise to even an inference of antitrust wrongdoing. Thus, even when carrying out approved and legitimate activities members must be careful to avoid discussions or exchanges of information with their competitors on any subject relating to the "per se" restraints listed above since such discussions or information exchanges may give rise to inferences of agreement. As examples, you should avoid any discussion with competitors of the following:

- (a) Individual company prices, price changes, price differentials, mark-ups, discounts, allowances, credit terms, etc.
- (b) Individual company figures on costs, production, capacity, inventories, sales, etc.
- (c) Industry pricing policies, price levels, price changes, differentials, etc.

(d) Changes in inventories

(e) Transportation shipper basing pointization, etc.

Note: This was charges against MCA (phosphate) case. Most of the producers in this practices charged. It was another principle charges pertained to long since been established it was illegal, but in signing a consent agreement charged, in ongoing litigation.

(f) Bids on contracts procedures for

(g) Plans of industrial design, production, particular practices or customs

(h) Matters relating to customers that affect them from a

(i) Any matter relating to

Regardless of whether or not to tolerate any meeting in connection with CMA by which is concerned with the terms of reference with the procedure

* As approved by the Board of Directors on March 12, 1963, and amended by the Executive Committee on March 19, 1977; July 11, 1978, and June 3, 1981.

- (d) Changes in industry production, capacity, or inventories.
- (e) Transportation rates or rate policies of individual shipments or particular products, including basing point systems, zone prices, freight equalization, etc.

Note: This was an alleged factor in the 1962 FTC charges against MCA (now CMA) in the TSP (trisodium phosphate) case. MCA denied the charges, but joined the producers in signing a consent order prohibiting the practices charged. Standardization of TSP containers was another principal factor in the TSP case these charges pertained to an activity in 1939-1940 which has long since been abandoned. MCA denied that this activity was illegal, but joined the respondent TSP producers in signing a consent order prohibiting the various practices charged, in order to avoid costly and time consuming litigation.

- (f) Bids on contracts for particular products; procedures for responding to bid invitations.
- (g) Plans of individual companies concerning the design, production, distribution or marketing of particular products, including proposed territories or customers.
- (h) Matters relating to individual suppliers or customers that might have the effect of excluding them from any market.
- (i) Any matter relating to TSP as a specific product.

Regardless of subject matter, you should not attend or tolerate any meeting with your competitors in connection with CMA business which has no agenda, or which is concerned with matters outside your committee's terms of reference, or which otherwise fails to conform with the procedures in the General Principles.

Informal Gatherings

It is important to avoid discussions of the above subjects, not only at formal CMA or committee meetings, but also in connection with social or other gatherings on those occasions. If any improper discussion should start in your presence, you should protest; if the discussion continues, you should promptly excuse yourself from the group and communicate your protest to the appropriate CMA staff manager. Even if you do not take part in any improper discussion, your presence without participation could still get you and your company into trouble. Any individuals who participate in such improper discussions, whether deliberately or innocently, are doing their companies, and CMA, a real disservice, and subjecting themselves to possible liability. In case of doubt as to whether a particular subject may properly be discussed with your competitors, you should consult your own company counsel.

Documents

Care must be taken to avoid wording any written documents including reports or notes from committee meetings in a way that might be interpreted as indicating, contrary to fact, the existence of an antitrust violation. Every memorandum, letter or other document dealing with prices, competition, or the other danger areas specified in this guide should be written with the assumption that it will one day be examined for antitrust implications. An antitrust case may be based on documents which are in reality innocent or innocuous but have been written in such a way as to create suspicion and require explanation. Such documents may include personal notes based on recollection, or taken at committee or other meetings, which record personal impressions rather than the facts of what transpired.

Conclusion

It is hoped that this guide will help you to understand how the antitrust laws bear upon trade association activities, and to carry out your CMA work in full compliance with these laws and with CMA policies. Again, please remember that this is a limited outline and is not intended to be a complete description of the application of the antitrust laws. For answers to specific problems, you should consult CMA counsel and your own company counsel.

OBLIGATIONS AND PROCEDURE FOR MEMBER DISSENT*

The strength of an effective association in an advocacy role is its ability to identify issues of common concern to its members and to reach agreement on collective policy. When that agreement is reached, the Association can then strongly advocate a unified industry position. While the Association's objective is to strive for consensus on every issue, CMA recognizes that there may be cases, following the constructive sharing of diverse opinions, when individual members may ultimately choose to dissent from a CMA position.

If a member company intends to advocate publicly a position on an issue which it believes is not consistent with an existing CMA position, the company should first inform the Association, by letter to the President, stating the basis for its disagreement, and give the Association a reasonable length of time to respond before presenting its position to others outside the Association. Before external dissent takes place, thorough internal discussion should be conducted either to resolve or confirm identified differences. The Association has the responsibility of expeditiously reweighing its original position to determine whether it should be modified. To aid this internal review, members who initiate this process of dissent should inform the Association of any parties to whom they have expressed a contrary position and what the nature of the dialogue was so that this information can be utilized in the process of reevaluating the Association's position.

If the identified differences are not resolved, the Association recognizes the right of the member company to publicly pursue its own position. When presenting its position to others, the dissenting member company

should make clear that it speaks for itself and not for the Association and the industry. Anyone can express to others outside the Association a CMA position, but only one designated by the Board or the President can represent that he speaks on behalf of CMA.

Similar procedures should be followed in those cases where the Association does not have an existing position on an issue, but has begun the process of developing such a position. In those instances, the member company should inform the Association, by letter to the President, of its intent to present that position to others. If possible, the member company should defer presenting its position to others until CMA has had a reasonable opportunity to review the company's position, identify any potential areas of significant concern and attempt to reach an agreement on a CMA position. The Association recognizes that in some cases the time for CMA review and action will be very limited. In the absence of a CMA position on an issue, a member company presenting its position to others should make it clear that it is speaking for itself and not the Association.

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*As approved by the Board of Directors on June 5, 1980, and amended by the Board on June 6, 1985.

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CMA AND ADVOCACY*

Advocacy means pleading or defending a cause, hence advocacy is implicit in CMA's representation of the chemical manufacturing industry, and should be conducted forthrightly and forcefully, concentrating on matters which affect a number of its members or which broadly concern the chemical manufacturing industry even though not immediately affecting many members.

To be beneficial, advocacy must be persuasive. Solid evidence and reasoned interpretation coupled with effective presentation are needed.

Enlightened and progressive advocacy is directed to the common good rather than being merely self serving.

Bearing in mind the pervasive significance of chemicals, it is vital that CMA advocacy so qualify.

Advocacy on behalf of a collective industrial group must heed antitrust limitations. For this reason and because of the fact that certain chemicals compete with others in the marketplace for similar purposes, CMA normally limits its advocacy to matters having general applicability, as contrasted with those involving particular chemical substances or companies. If an important precedent-setting principle is involved, however, CMA may elect to advocate it regarding the principle alone.

The foregoing precepts underlie CMA's advocacy role. Each member company should recognize this in no way diminishes its responsibility to protect its own interests, nor is intended to restrict independence in so doing. Each member company is encouraged to express its individual views.

**As approved by the Executive Committee on July 11, 1978.*



NOTES

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CHEMICAL MANUFACTURERS ASSOCIATION

File 27.1

December 27, 1990

TO: CMA Air Contacts

SUBJECT: Clean Air Strategic Plan

Enclosed is the final version of the Strategic Plan which describes how CMA will conduct its regulatory advocacy program in response to the new reauthorized Clean Air Act. The Plan is divided into three parts: (I) an introduction which summarizes the key findings of the report; (II) a compilation of strategic work plans developed by each work group which describe the action items and work products that are necessary to meet each objective; and (III) appendices which provide detailed cost data and other explanatory notes.

Simultaneous to this mailing, the Strategic Plan has been mailed to the CMA Board of Directors in preparation for their January 15, 1991 meeting in Washington. If the Plan is approved by the Board, we will begin implementing it immediately.

If you have any questions about the Plan, please give me a call at (202) 887-1313.

Thank you for your help in developing this Plan.

Sincerely,

Richard G. Sigman
Associate Director
Air Programs

Enclosure

**CMA
STRATEGIC PLAN
FOR REGULATORY ADVOCACY**

**IN RESPONSE TO
THE REAUTHORIZED 1990 CLEAN AIR ACT
December 21, 1990**



CHEMICAL
MANUFACTURERS
ASSOCIATION

2501 M Street, NW 202 887-1100
Washington, D.C. 20037 Telex 89617 (CMA WSH)

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**CMA
STRATEGIC PLAN
FOR REGULATORY ADVOCACY**

**IN RESPONSE TO
THE REAUTHORIZED 1990 CLEAN AIR ACT
December 21, 1990**

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PART I -- INTRODUCTION

BACKGROUND

In November 1990, the first Clean Air Act (CAA) amendments in thirteen years were signed by President Bush. With these amendments will come massive new regulatory programs, projected to be the most encompassing in scope and the most expensive in the history of environmental regulation.

At about the same time that President Bush signed the Clean Air Act amendments into law, the CMA Board of Directors approved the report of the Ad Hoc Subcommittee on Regulatory Advocacy. That report recommended that the Environmental Management Committee, through the appropriate Task Groups and Work Groups, create a pilot program to implement the recommendations of the report. This program would improve regulatory advocacy by adhering closely to an "ideal vision and process" identified in the Subcommittee's recommendations. The pilot program, as reflected in this Strategic Plan, identifies how CMA can most effectively advocate industry positions in the development of the new Clean Air Act regulatory programs. The ideal vision and process embodied in the Plan describe:

- ☐ key issues in regulatory development and their importance to the chemical industry;
- ☐ how success of the Plan can be measured;
- ☐ the barriers to successful implementation of the Plan;
- ☐ the resources needed to carry out the Plan;
- ☐ the cost to conduct the Plan; and
- ☐ the benefits of successful advocacy.

This five-year plan begins with an overall statement of goals and objectives. Each of the elements in the ideal vision and process listed above is then described in the context of each objective.

While the costs to CMA and its member companies to implement the Plan are significant, (approximately a 34% increase) over historical costs, if we are successful we can save the industry in excess of \$1.4 billion, measured in terms of deferred capital expenditures and decreased overall costs of compliance. Since the savings estimates are extremely conservative, there is no question that the overall cost of implementation of this Plan is low compared to the benefits.

Obviously, the chemical industry is not the only industry to be affected by these amendments. While we are ahead of other industry groups in responding to most new programs, we have anticipated that CMA can significantly leverage its resources by working with other trade associations. Specifically, CMA will seek joint funding arrangements with other associations on projects of mutual interest as it has in the past with other air projects. In addition, CMA plans to increase its effectiveness and minimize duplicative efforts by actively participating in an inter-industry coalition. This coalition, currently under development by CMA and others, will organize major advocacy efforts and exchange information on industry activities. Areas where there are overlapping interests, where inter-association efforts are most likely to be beneficial, are identified in Appendix I.

The Plan is organized into three parts:

- (I) **Introduction** which includes this background, the scope of the plan, goals in responding to the Act, the objectives necessary to meet these goals, the costs of implementing this plan and complying with anticipated regulations, and the benefit of such actions;
- (II) **Strategic Work Plans** which describe in detail for each objective: the action items, work products, responsible groups, barriers and opposition, CMA and company resources needed, and the cost and benefit of the objective; and
- (III) **Appendices** which describe the role of each work group and task group in the process, the projects they are responsible for, how CMA will coordinate with other trade associations, economic data, future meetings of the AITG, and a glossary of key terms.

Part I of the Plan is designed to serve as a stand-alone document summarizing the main components of the Plan.

SCOPE OF THE PLAN

The Clean Air Act amendments of 1990 is one of the most far-reaching environmental legislation ever enacted. Not only are traditional sources of air pollution subject to new levels of control, but many previously unregulated sources will also be included. For the first time, the Clean Air Act has adopted a technology-based approach, followed by a risk-based determination, for the control of hazardous air pollutants. These provisions alone will result in the promulgation of literally hundreds of regulations, as well as numerous related guidance documents, studies, and reports.

This Plan addresses those aspects of the Clean Air Act that are of most concern to CMA members, including:

- ☐ nonattainment rules;
- ☐ technology-based standards for control of air toxics;
- ☐ risk assessment and risk management provisions;
- ☐ risk-based standards for control of air toxics;
- ☐ new source performance standards;
- ☐ requirements to manage accidental releases;
- ☐ permitting; and
- ☐ enforcement.

Since this Plan will evolve over time as more information becomes available, the work plans for responding to certain provisions in the Act that have not historically been part of CMA's Air Program will be added at a later date. These provisions include: atmospheric deposition to the Great Lakes and coastal waters; solid waste combustion; publicly owned treatment works; consumer products; visibility, the Environmental Protection Agency (EPA) and the Government Accounting Office (GAO) reports on benefits and costs; and acid rain. Finally, those areas that will not be included in the Plan since they are being addressed by other trade associations include: vehicle emissions, alternative fuels, Chlorofluorocarbons (CFCs), and controls for small sources such as dry cleaners and gas stations.

GOALS AND OBJECTIVES

The Plan includes three main goals to effective Clean Air advocacy. Each goal is made up of objectives which are measurable and achievable and designed to accomplish the stated goal in a specified period of time. Part II of this Plan includes a separate work plan for each objective. A list of the goals and objectives follows. (The order of the objectives does not indicate any priority ranking but rather follows along lines of work group responsibilities. It should be noted that, in general, Goal 1 is of higher importance than Goals 2 and 3, and in most instances, residual risk and MACT related activities are highest priority within Goal 1.)

Goal 1: To enhance the advocacy role of the chemical industry to act expeditiously, responsibly, and positively, in influencing the development and implementation of responsible Clean Air regulations.

Objectives: Advocate for . . .

1. The development of a reasonable and straightforward process for chemical listing/delisting.
2. An appropriate source category list which includes a reasonable number of sources for Maximum Achievable Control Technology (MACT) standards with a staggered phase-in-schedule.
3. The development of MACT standards for vents, storage and transfer operations which are technically feasible, performance based, and cost effective.
4. An acceptable definition of MACT for wastewater treatment which allows adequate time for compliance.
5. MACT standards for equipment leaks that reduce emissions while being economically and technically feasible.
6. Revisions of existing EPA emission factors for equipment leaks and identification and promotion of implementation by member companies of low equipment leak emissions performance technology and operating practices.
7. The development of reasonable New Source Performance Standards (NSPS).
8. The promulgation of nonattainment regulations that target sources which are major contributors to the problem, contain reasonable requirements, recognize voluntary emissions reductions and are cost effective.
9. The development of a Federal permit program that allows and encourages states to avoid multiple permits for the same source; contains reasonable application requirements and schedules; encourages permit issuance in a timely and cost effective manner; embraces rather than replaces good state permit program elements; and recognizes and encourages voluntary and innovative control efforts.
10. The establishment of enforcement criteria that are reasonable and fair; differentiate penalties by seriousness of offense; and do not abridge the protection of the Constitution regarding self-incrimination.
11. Sound scientific changes, if necessary, to the ozone standard.
12. Reconsideration of EPA's current ozone attainment strategy to properly account for nitrogen oxides (NOx) controls, contribution of area, mobile, and biogenic sources, and ozone and precursor transport.

13. A residual risk determination procedure that accurately identifies real risks posed to a community. (This comprises a major portion of a larger CMA-wide project on risk. Costs in the Plan for this activity account for only that portion necessary to support the Clean Air Act implementation.)
14. Air quality modeling guidelines that result in reasonable, resource effective models and model application rules.
15. The development of reasonable accidental releases/process safety management regulations.

Goal 2: To communicate the results of the advocacy efforts to member companies.

Objective: Acquaint member companies with results of advocacy efforts so that they may be prepared for anticipated regulations.

Goal 3: Monitor and positively influence air pollution research and advocate for the use of such research in crafting sound and scientifically based legislation and regulations.

Objective: The development of a program to monitor current air pollution research and contribute to additional research that may influence the development of more scientifically based legislation and regulations.

MEASUREMENT OF PROGRESS

The appropriate task group will have the lead responsibility for monitoring adherence to the Plan. Progress will be measured by completion of specific action items and objectives. Periodic progress reports on each objective will be prepared and forwarded for CMA Board updates. Over time, the objectives may be modified, deleted, or new ones added as appropriate. Similarly, modifications, deletions, or additions to the actions under each objective are also easily made with accompanying changes to the resource needs.

COSTS

Costs associated with the Plan include both the cost of implementing the Plan ("Plan Implementation Costs"), and the costs to the chemical industry for compliance with all new regulations, ("Regulatory Compliance Costs").

Plan Implementation Costs

Contents

The implementation costs associated with meeting each objective include:

- ☐ Outside Purchased Services (O.P.S.)—which are broken down by department (not including the Office of General Counsel);
- ☐ Company time (time for meetings, preparation of comments, etc.)—which is converted to dollars by multiplying the number of days by \$800/day;
- ☐ Company travel associated with each objective;
- ☐ CMA staff time (broken down by department)—which is converted to dollars by multiplying the number of days by \$400/day (Note that the staff totals do not include support staff);
- ☐ CMA travel (broken down by department)—which equals approximately \$600 per trip; and
- ☐ Outside Legal Services (O.L.S.) (Office of General Counsel only).

Total Cost

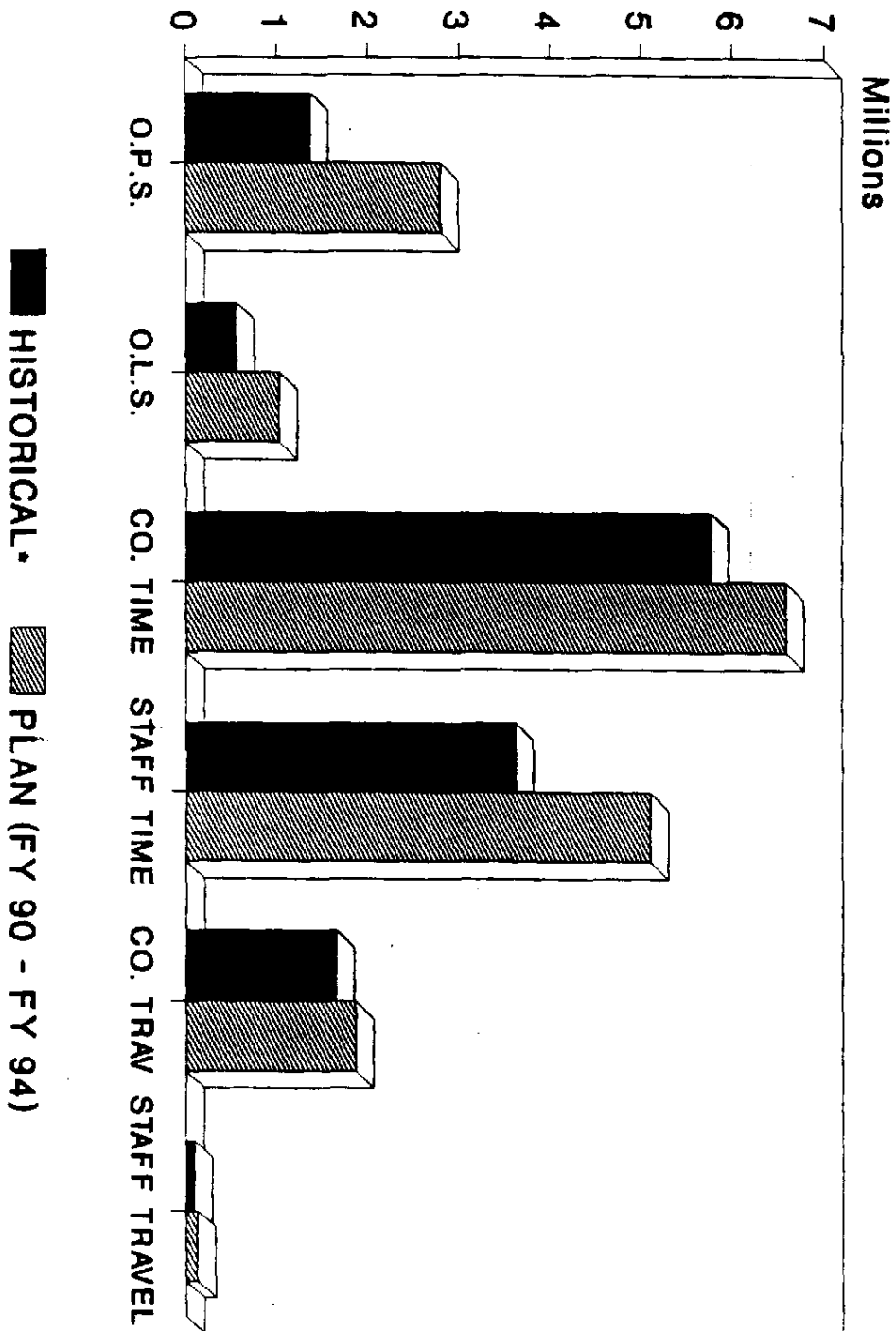
To put the cost of implementing this Plan into perspective, it is important to compare it with the cost of the Air Program for the last fiscal year (FY 89/90). Based on historical data (see Appendix II), it is estimated that this Plan would require only a 34% increase in funding from last year. This is due to the unusually high level of activity last year as CMA's Air Program simultaneously supported the industry legislative advocacy efforts on the Clean Air Act and regulatory negotiations with EPA.

As can be seen from Figure 1, the incremental funding necessary varies from cost category to cost category. Company time and travel expenses will increase only 14% and 13% respectively as companies shift support from legislative advocacy to regulatory advocacy. The same can be said for CMA staff time which increases only 41%. Where increases in costs are significant, a change in the type of support for advocacy is responsible. For instance, reviewing and commenting on regulations requires extensive technical and legal support far beyond that necessary to analyze broad legislative initiatives. Much of this support cannot be provided by in-house staff. Thus, significant increases in outside services for the Technical Department (105%) and the Office of General Counsel (86%) are required. In addition, as CMA shifts its focus from Capitol Hill to EPA's Air Office located in North Carolina, travel costs will go up. (Note that company travel costs will not be increased by this shift.)

Also important to note is the breakdown of cost categories within the Plan. Although the outside service budget will rise significantly, it makes up only 22% of the total cost (see Figure 2). Thus, while all of the numbers, taken in the abstract appear high, a significant portion of the total, approximately 49%, represents the value of member company time and travel, and is not part of CMA's budget.

Appendix III provides a breakdown of the costs of the Plan by objective and cost element. A summary of

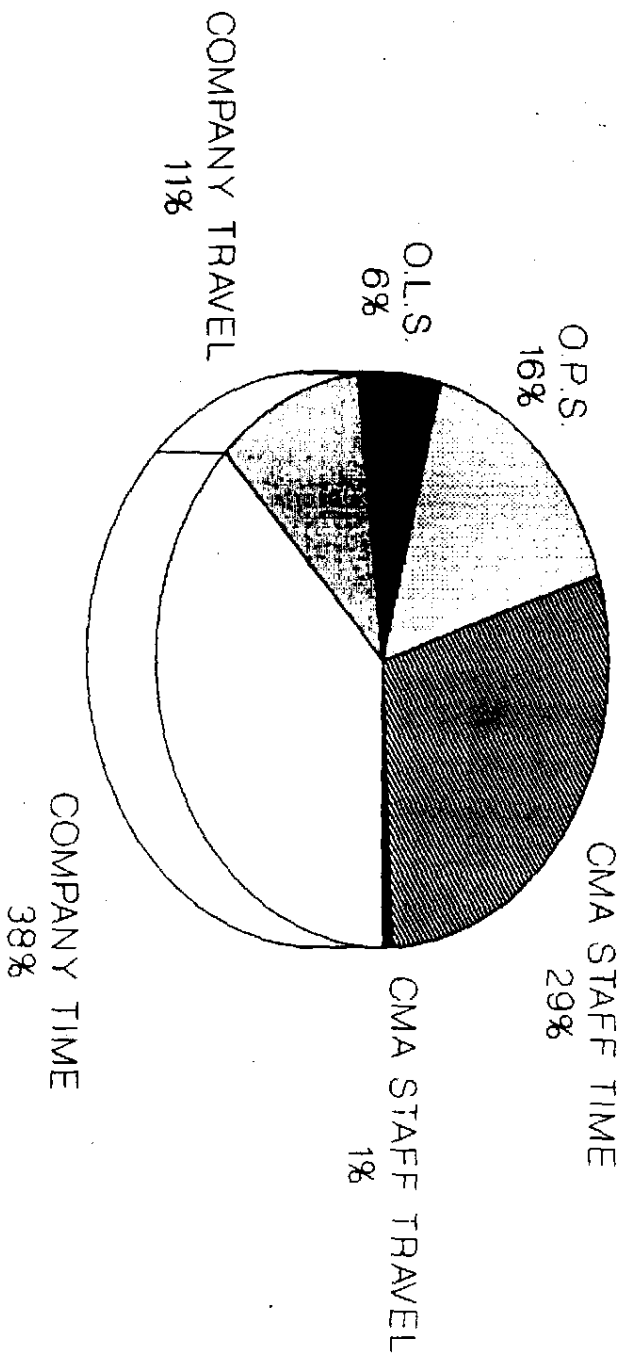
COMPARISON OF HISTORICAL VS. PLAN COSTS (FIVE YEAR TOTALS FOR EACH IN DOLLARS)



• FY 89/90 FIGURES TIMES 5 YEARS

FIGURE 2

BREAKDOWN OF TOTAL COSTS (FY 90/91 - 94/95)



O.P.S. OUTSIDE PURCHASED SERVICES
O.L.S. OUTSIDE LEGAL SERVICES

total costs to CMA and its members for all objectives, for all five years of the Plan are listed below in Table 1. Historical costs (FY 89/90 times 5 years) are also provided for reference.

TABLE 1
COMPARISON OF HISTORICAL VERSUS PLAN COSTS
(in dollars)

Cost Category	Plan (1)	Historical(2)	% Increase
Outside Purchased Services	2,796,250	1,364,250	105%
Outside Legal Services	1,021,500	550,000	86%
Company Time	6,582,400	5,763,200	14%
Company Travel	1,855,600	1,642,550	13%
CMA Staff Time	5,100,800	3,616,667	41%
CMA Staff Travel	122,000	88,000	39%
Total	17,478,550	13,024,667	34%

Notes

(1) Plan -- Totals For FY 90/91 through FY 94/95

(2) Historical -- Totals For FY 89/90 times five years for comparison purposes

CMA Costs

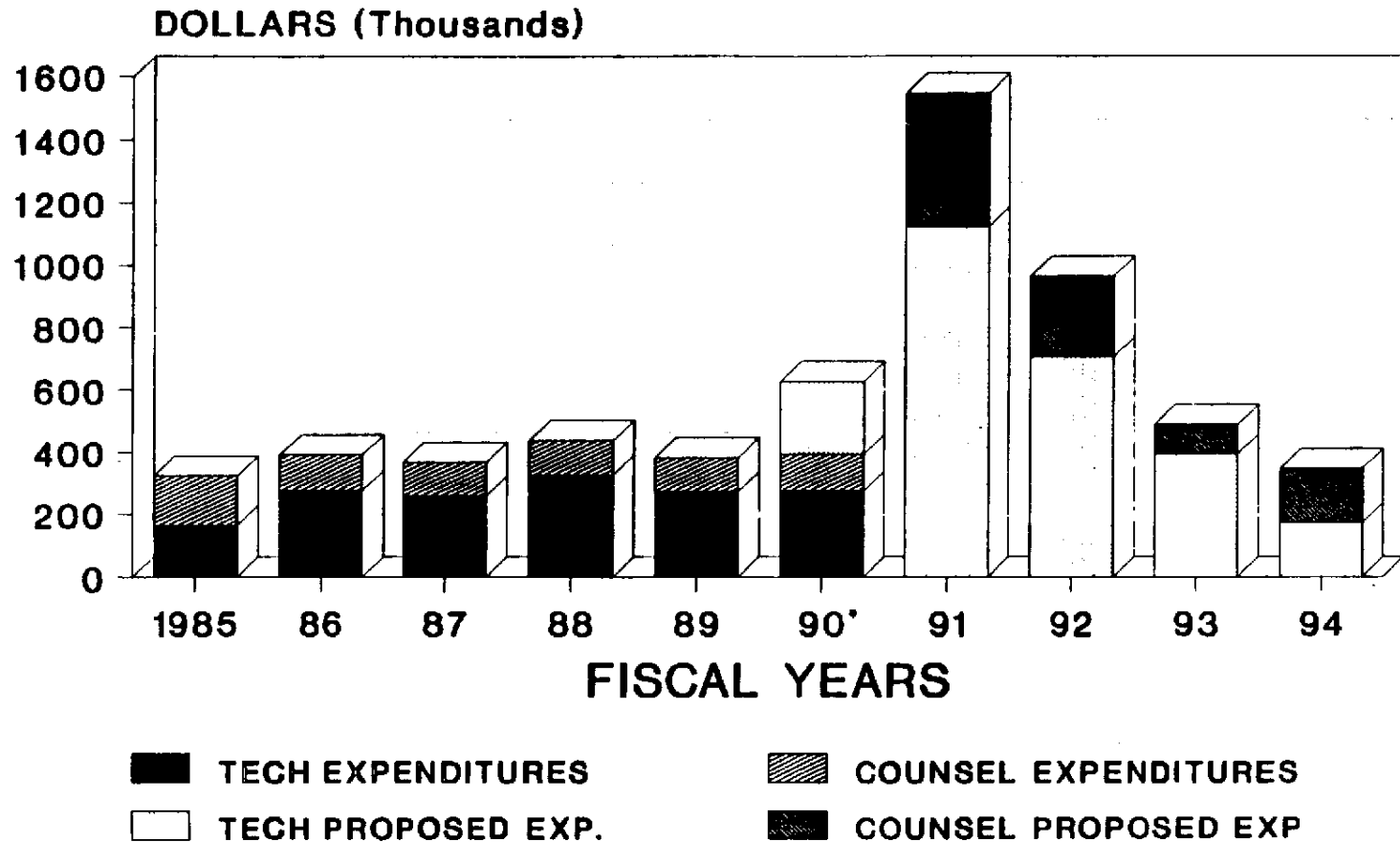
Outside Services

The bulk of the responsibility for implementation of this Plan will fall primarily to the Technical Department and the Office of General Counsel. While some support will be provided by the State Affairs and Federal Government Relations Departments, the Plan envisions this solely as member company and staff support -- not outside services. Within the Technical Department, costs have been broken out by the Environmental Division and the Health and Safety Programs. (Appendix IV provides a detailed break down of outside services costs by fiscal year, objective, and Department.)

Particularly in the first full year of the Plan, when the bulk of regulatory decisions will be made by EPA, the costs represent a significant increase over spending levels in the current fiscal year (see Figure 3). By FY 1993/94, costs decrease significantly, to a level much closer to current spending levels. Interestingly, the level of funding needed over the five years of the Plan is about the same magnitude as funding for Clean Water Act implementation in the early 1980s.

FIGURE 3

CMA OUTSIDE SERVICES FOR AIR PROGRAM (HISTORICAL VS. PROJECTED UNDER PLAN)



* Current Fiscal Year (FY 90/91)

CMA Staff

One of the most significant impacts of this Plan will be on human resource demands. Increased activities, that will require increased staff, include the management of additional work groups, management of an increased number of contracts, additional interaction with the EPA and other agencies (consistent with the ideal advocacy process), and anticipated use of the "regulatory negotiation" process for at least two major rulemakings.

To adequately manage the increased work load, the Environmental Division is requesting two new manager positions be added in FY 91/92. These managers would serve as staff executives to the new work groups, manage a portion of the outside services contracts and manage one or more of the regulatory negotiation groups.

In addition, the Office of General Counsel (O.G.C.) is requesting an increase in staff from the 1.67 attorneys now assigned to Air Programs. OGC anticipates that as a result of increased client activities, and the increased pace of the rulemaking process generally, they will need to add one attorney and one paralegal in FY 91/92.

Because the activities envisioned in this Plan peak between 1991-1993, we are considering seeking a "loaned executive" from a member company who would staff some of the work in the first two years of implementation of the Plan. That individual could serve as a "typical" staff executive or fulfill a more specialized role. In either case, he or she would be a member of the CAA staff matrix.

Regulatory Compliance Cost

Compared with historical environmental costs, the impact of the Clean Air Act amendments on the chemical industry will be enormous. In 1989, the industry spent a total of about \$3.4 billion for all types of pollution abatement. By 1995, as a direct result of new Clean Air Act requirements, this figure will increase to at least \$6 billion (in 1989 dollars). By 2005, the annual cost will increase to at least \$10.4 billion (in 1989 dollars). Other costs, such as those for acid rain controls (both in terms of direct control costs and increased costs of electricity), permit requirements, and other control programs, will add another \$1.3 to 2.5 billion to the costs each year.

While the impact of the Clean Air Act will be felt for many years to come, the most significant increases in costs will occur in 1992 (see Figure 4 and Appendix V) just as implementation of this Plan is at its height. This rise will be so steep that it actually outpaces the increase in costs for implementation of this Plan. When compared to historical figures for implementation of the CMA Air Program versus gross annual costs, the cost of this Plan is a smaller percentage of compliance costs:

TABLE 2

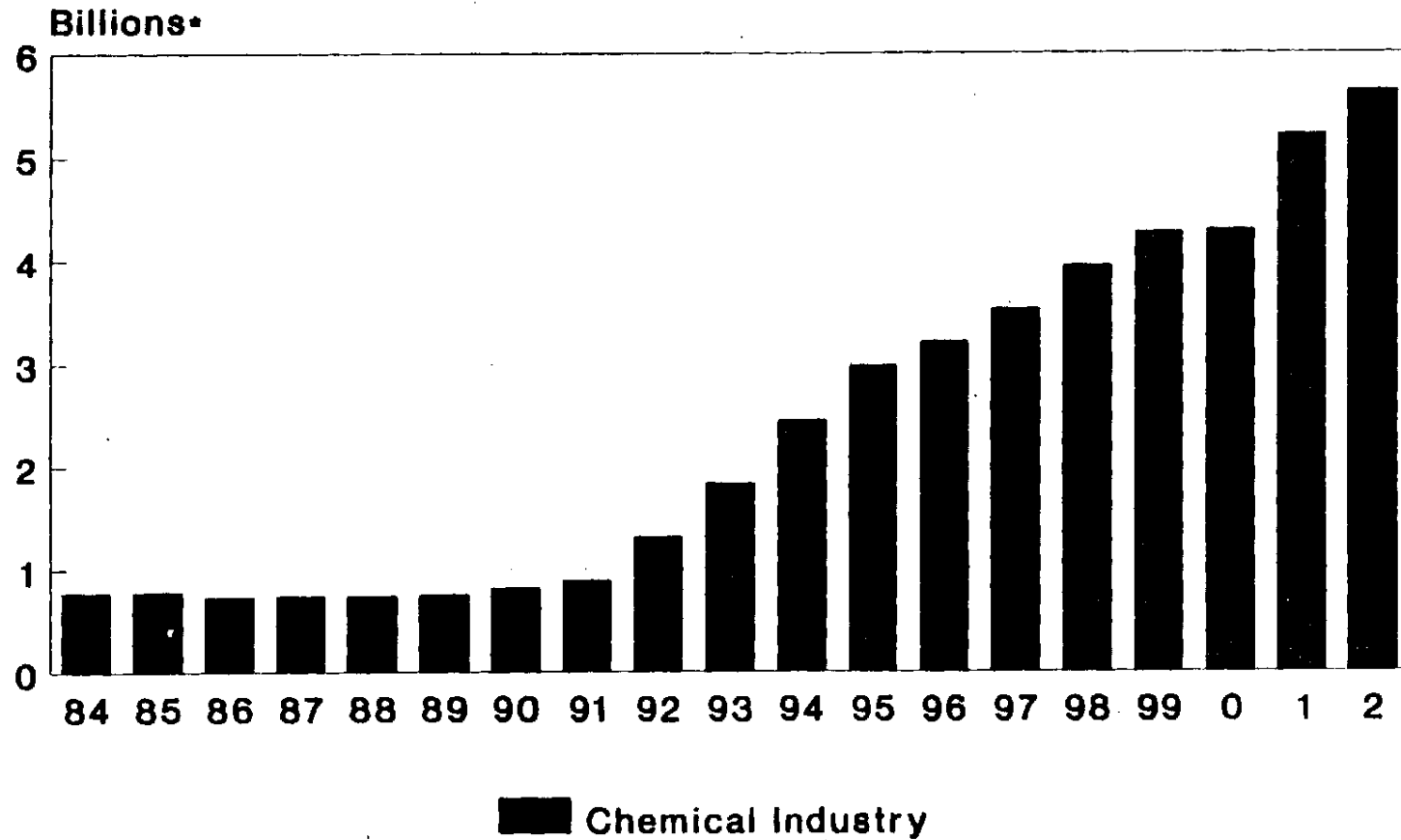
IMPLEMENTATION COST VERSUS REGULATORY COMPLIANCE COSTS

Cost of CMA's Air Program in FY 89/90	\$2,604,933
Air Pollution Abatement Gross Annual Costs in FY 89/90	\$782,500,000
Cost of CMA's Air Program as a Percentage of Compliance Costs	0.33%
Cost of Strategic Plan (FY 90/91 through FY 94/95)	\$17,478,550
Air Pollution Abatement Gross Annual Costs (FY 90/91 through FY 94/95)	\$8,365,000,000
Cost of Plan as a Percentage of Compliance Costs	0.21%

FIGURE 4

AIR POLLUTION ABATEMENT

GROSS ANNUAL COSTS (1984 - 2002)



*Billions in constant 1989 dollars

COST/BENEFIT

Through implementation of this Plan, CMA members most likely will see a decrease in the overall cost of compliance. Based on experience with regulations under the old Clean Air Act, and using very conservative assumptions of the possible impacts of effective advocacy, the Air Issues Task Group has estimated that the decrease in cost to the industry will be at least \$1.4 billion over the next ten years. This figure, while admittedly inexact, is based on an estimate of:

- ☐ decreased costs to comply with the regulations (avoidance of the most expensive control option);
- ☐ reduced number of fines and shutdowns (more reasonable rules make compliance more certain);
- ☐ better allocation of capital expenditures (avoidance of premiums that result when demand for controls exceeds supply, and phase-in of industry compliance); and
- ☐ reduced administrative costs for permitting.

When the cost of implementing the Plan, \$17.5 million, is compared to a cost avoidance of at least \$1.4 billion, the cost/benefit ratio is very favorable.

Not included in these savings are the reduced compliance costs for the years beyond the life of the Plan. Since many of the decisions made during Plan implementation (FY 90/91 - FY 94/95) will affect the regulatory requirements as far out as the year 2001, success during the Plan's implementation will provide an additional bonus in later years. For instance, the size and diversity within a source category will be determined by EPA during FY 90/91 setting the schedule for how all sources will be regulated over the next ten years.

Estimated costs and benefits are summarized below in Table 3.

TABLE 3
COST BENEFIT OF THE STRATEGIC PLAN

Cost of Strategic Plan:	\$ 17,500,000
Cost of the Clean Air Act Without Advocacy:	\$ 8,400,000,000
The cost of the Plan is .20% of the cost of the Clean Air Act to the industry	
Cost of Strategic Plan:	\$ 17,500,000
Net Savings Under Strategic Plan:	\$ 1,400,000,000 *
Cost/Benefit Ratio:	0.0125

*Does not include estimated savings beyond FY 1994/95 due to advocacy efforts in Plan.

PART II
STRATEGIC WORK PLANS

GOAL #1, OBJECTIVE #1 CHEMICAL LISTING/DELISTING

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly, and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #1:

Advocate for the development of a reasonable and straightforward process for chemical listing/delisting

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	230 Days
*O.P.S.	\$60,000
CMA Staff	660 Days
Company Travel	\$72,000
CMA Travel	\$5,400
*O.L.S.	\$210,000

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP LEAD/SUPPORT</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Participate in preliminary meetings with EPA	AT/H&S	Minutes, reports	3/30/91
Collect and review information	AT/H&S	Report	6/01/91-9/30/91
Propose Regulatory Negotiations to EPA	AT/H&S	Letter proposal	6/30/91
Develop CMA positions	AT/H&S	White-paper Contractor reports	(1) 9/30/91
Draft position papers on basis for list	AT/H&S	Contractor report	(2) 12/31/91
Propose CMA List/Delist procedure	AT/H&S	Letter proposal to EPA	3/31/92
Respond to EPA and other party suggestions	AT/H&S	Minutes, reports	3/31/92
Participate in Regulatory Negotiations Meetings	AT/H&S	Minutes, reports	3/31/92
Respond to Issues	AT/H&S	CMA reports	10/31/92
Comment on proposed rules	AT/H&S	CMA comments	12/31/92
Review final rules	AT/H&S	Evaluation/summary	12/31/93
AT-Air Toxics Work Group H&S-Health and Safety Committee			
<u>CONTRACTOR</u>	<u>COSTS</u>	<u>FISCAL YEAR</u>	
(1a)	\$10,000	1990/91	
(1b)	\$30,000	1991/92	
(2)	\$20,000	1991/92	
<u>CMA RESOURCE BREAKDOWN</u>			
<u>TECHNICAL</u>	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S/O.L.S. (\$)</u>
Environmental	450	\$2,400	\$ 60,000
Health & Safety	110		
<u>LEGAL</u>	100	\$3,000	\$210,000

GOAL #1, OBJECTIVE #1 -- CHEMICAL LISTING/DELISTING

Description of Issue

The Clean Air Act contains a list of 189 hazardous air pollutants including 17 categories of compounds such as glycol ethers, for which EPA must develop MACT standards. The Act contains provisions for EPA to add or delete a substance from the list. Additions may be made if EPA judges there is sufficient evidence that a substance is a carcinogen or causes other serious or irreversible health effects. More importantly, EPA may delete a pollutant from the list if there is sufficient lack of evidence of carcinogenicity or other health effects. To get a substance listed or delisted, a petition must be filed with adequate supporting information.

Importance to Industry

In general the magnitude of the hazardous air pollutant list defines the scope of the MACT standards on the chemical industry. The list contains substances that range widely in the degree and nature of associated health effects. In particular, the compound classes included on the list contain specific compounds that vary significantly in their health effects. The chemical delisting provisions are an important tool for industry to use to ensure that EPA regulates the chemicals that Congress intended, i.e., those that cause or can be reasonably expected to cause cancer or other serious or irreversible health effects.

Criteria for Success

To be a usable provision, the petition process developed by EPA for listing/delisting substances must be straightforward. Both the necessary actions on the part of the petitioner and the reviewer must be well-defined. For example, the type and amount of information needed to support a petition should be specified. Additionally, the criteria for judging petitions and the schedule for granting or denying them should be specified. Each of these elements should be addressed by EPA when they develop the petition process.

The criteria for success for any individual petition would be a timely and critical review of each technically-supported petition with the judgment by EPA that such petitions should be granted. EPA's decision should be presented in such a way that negative public perception is avoided, and if possible to have pro-environmental group acceptance of proposals/petition.

Timing

The Clean Air Act allows individuals to submit petitions to have substances added to or deleted from the hazardous air pollutant list any time after enactment. EPA has 18 months after receipt of a petition to either grant or deny it. EPA, therefore, must have its petition process in place very soon after enactment.

To have the greatest chance of success, a petition should be submitted for consideration before EPA has invested a lot of time and resources in developing MACT standards for categories emitting that substance. At the latest, petitions must be submitted before the MACT standard is issued for that substance. For the chemical industry, therefore, petitions should be submitted as soon as possible after the Act is passed but no later than two years after enactment.

Options

1. **Proactive advocacy methods** -- CMA could conduct proactive advocacy by providing input on a workable petition approach before EPA has developed it and by working with EPA on development and evaluation of information needed to support individual petitions for specific substances.
2. **Traditional advocacy methods (Reactive)** -- CMA could approach advocacy in a traditionally reactive manner by providing oral and/or written comments to EPA after EPA decisions on the petition process are announced and by submitting and/or commenting on individual petitions for listing/delisting specific substances.

GOAL #1, OBJECTIVE #1 – Chemical Listing/Delisting (cont.)

3. **No action** -- CMA could take no advocacy position whatsoever on EPA's petition process or on individual petitions to get specific substances delisted.

Barriers and Opposition

EPA probably views the development of the petition process for adding or deleting specific substances from the hazardous air pollutant list as an administrative activity. Therefore, they may not welcome the chemical industry's input on how this process should work. Furthermore, from experience under SARA Title III, it is likely that the delisting of substances will be a "high hurdle" as EPA will be reluctant to go against Congress in their development of the list. The public perception of delisting a chemical is likely to be very negative.

Cost and Benefit

Benefits will undoubtedly vary from company to company. Primary benefits will be to avoid unnecessary expenditures (capital and expense) that result in little or no positive impact on human health or environment. Benefit estimated at \$20,000,000 per chemical delisted before MACT controls are required. If advocacy results in a listing/delisting procedure that enables five chemicals to be delisted, or that prevents five additional chemicals from being listed, cost savings of approximately \$100,000,000 could be realized.

Actions Selected

Proactive Advocacy

1. **Schedule meeting** with EPA to identify key players and share thoughts and ideas.
2. **Review EPA plans** and develop strategy to positively influence delisting process.
3. **Decide if cost/benefit analysis** warrants further action.
4. **Evaluate chemical listing/delisting** as candidate for regulatory negotiation with EPA and other interested parties.

GOAL #1, OBJECTIVE #1 -- Chemical Listing/Delisting (cont.)

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Preliminary Meetings with EPA	20	6,000	8	10	1,200	1,200	--	
Data Collection and Review	10	6,000	36	10	--	0	--	20,000
Propose Reg-Neg to EPA	10	6,000	22	10	--	0	--	
Setup Reg-Neg Process	10	6,000	22	10	--	600	60,000	
Identify issues interested parties and schedule	30	6,000	112	15	--	0	20,000	20,000
Propose CMA List/Delist Procedures	60	18,000	134	15	1,200	1,200	100,000	
Respond to Responses	60	18,000	134	5	--	0	20,000	20,000
Comment on Proposal	30	6,000	92	15	--	0	--	
Review final rule	--	--	--	10	--	0	--	--
Totals	230	\$72,000	560	100	\$2,400	3,000	\$210,000	\$60,000

Responsibility

- The Air Toxics Work Group, in conjunction with the Health and Safety Committee, will take the lead in promoting CMA's advocacy on this issue.

Performance Measures

1. Well defined guidance/regulation in place for member companies to use.
2. Guidance acceptable to environmental advocacy groups and public at large.
3. EPA acceptance of CMA suggestions/comments.
4. Open dialogue with EPA (meetings and correspondence).

GOAL #1, OBJECTIVE #2 **MACT SOURCE CATEGORIES**

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #2:

Advocate for an appropriate source category list which includes a reasonable number of sources for MACT standards with a staggered phase-in schedule.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	360 Days
*O.P.S.	\$78,000
CMA Staff	508 Days
Company Travel	\$108,000
CMA Travel	\$4,800
*O.L.S.	\$0

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Meet with EPA	AT	Minutes, proposals	On-going
Develop database	AT	Technical database for source category selection (Contractor report)	(1) 12/31/90
Propose source grouping	AT	List of sources	(2) 3/31/91
Review EPA groupings	AT	List of sources	(3) 7/31/91
Work with EPA on final list	AT	List of sources	8/30/91
Inform member companies	AT	Reports	9/30/91
AT-Air Toxics Work Group			
<u>CONTRACTOR</u>	<u>COSTS</u>	<u>FISCAL YEAR</u>	
(1)	\$36,000	1990/91	
(2)	\$12,000	1990/91	
(3)	\$30,000	1991/92	
<u>CMA RESOURCE BREAKDOWN</u>			
	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S./O.L.S. (\$)</u>
<u>TECHNICAL</u>			
Environmental	448	2,400	78,000
<u>LEGAL</u>	60	2,400	0

GOAL #1, OBJECTIVE #2 -- MACT SOURCE CATEGORIES

Description of Issue

The Clean Air Act requires EPA to publish a list of all categories of major sources of hazardous air pollutants within 12 months of enactment. EPA must develop MACT standards for all categories on the list according to a schedule prescribed in the Act. The Clean Air Act gives EPA a lot of discretion in how broadly or narrowly they define source categories on the list. For example, EPA could list the Synthetic Organic Chemical Manufacturing Industry (SOCMI) as a source category. Conversely, they could list individual chemical production processes such as butadiene production and ethylene oxide production as source categories. In addition to how broadly and narrowly EPA defines source categories, CMA is also concerned about the schedule under which EPA will issue MACT standards for the chemical industry.

Importance to Industry

The way in which EPA defines source categories within the chemical manufacturing industry could have a significant impact on several aspects of Clean Air Act implementation. First, it will set the basis for how MACT standards are to be developed. If EPA defines a broad source category such as "SOCMI," then it will be necessary for EPA to develop generic standards that can be applied broadly across all facilities in the industry. However, if EPA defines source categories on the basis of individual process categories, then it would be possible for EPA to consider unique aspects of each individual source category when developing its MACT standard.

The schedule for issuing MACT standards is also of extreme importance to industry. Under the Clean Air Act, EPA must issue MACT standards for at least 40 source categories within two years of enactment. EPA has indicated to CMA that they intend to regulate all SOCMI facilities within the 40 source categories regulated at Year two.

In addition to the MACT standards themselves, the way in which EPA defines source categories will determine the basis for how residual risk determinations are made in the future.

Criteria for Success

The source category list published by EPA should distinguish among subsets of the chemical manufacturing industry for purposes of developing MACT standards and for purposes of applying residual risk determinations. Ideally, these subsets should be based on individual chemical production processes such as butadiene production or ethylene oxide production. Alternatively, these subsets could combine individual chemical production processes into common groupings based on the characteristics of the process, the chemicals produced, or other operational criteria for which different control strategies would be appropriate.

The schedule for regulating source categories in the chemical industry should provide for a staggered phase-in to ensure that the compliance burden is spread out over a reasonable period of time. The availability of industry resources, as well as control equipment and other compliance-related services should be considered. The ability of State agency personnel to meet the corresponding permit load should also be considered in determining a reasonable phase-in schedule.

Timing

EPA has already begun work on the source category list. EPA has informed CMA of their intention to list "SOCMI" as a source category rather than to list individual chemical production processes or other subsets of SOCMI. However, they are receptive to other approaches provided that CMA can develop technically supportable recommendations in the next few months (by end of 1990). Because of the statutory requirement that EPA publish the list of source categories within 12 months of enactment, the period for advocacy on this issue will be brief.

GOAL #1, OBJECTIVE #2 -- MACT Source Categories (cont.)

With regard to the schedule for issuing MACT standards for the chemical industry, EPA has informed CMA of their intention to promulgate generic standards for the "SOCMI" source category in the first group of MACT standards promulgated within two years of enactment. EPA is already working on developing these standards. To successfully advocate this issue, CMA must provide EPA with technically supportable arguments very early in the rulemaking process. The most effective timing would be to combine input to EPA on the MACT standards schedule with information provided to EPA on the source category list (by end of 1990). However, unlike the source category list, CMA could comment on the MACT standards implementation schedule as late as proposal of the MACT standards.

Options

1. **Proactive advocacy methods** -- CMA could conduct proactive advocacy by providing technical support information for alternative approaches while EPA is still in the decision-making phase.
2. **Traditional advocacy methods (Reactive)** -- CMA could approach advocacy in a traditionally reactive manner by providing oral and/or written comments to EPA after EPA decisions are announced at the National Air Pollution Control Techniques Advisory Committee (NAPCTAC) or proposed in the *Federal Register*.
3. **No action** -- CMA could take no advocacy position whatsoever on EPA's Source Category list development and regulatory schedule.

Barriers and Opposition

EPA has a tremendous task ahead of them to meet the statutory standards development requirements and schedules. One way that EPA can help ensure meeting the statutory deadlines is to group the chemical manufacturing industry into one category, i.e., SOCMI, and to develop generic standards that can be broadly applied across the industry. In this way, EPA does not have to collect information on every chemical production category and do a separate rulemaking for them. Instead, it may rely on "available" information for the chemical industry as a whole. A major obstacle to successful advocacy on this issue is convincing EPA that alternative approaches will not interfere with their ability to meet their statutory deadlines.

Other barriers include opposition by environmental advocacy groups such as Natural Resources Defense Counsel, EDF, Sierra Club, etc., in the event of a lack of mutual understanding by such groups as to what industry and EPA are trying to accomplish.

Cost and Benefit

Savings of several hundred million dollars per year could be realized in avoided interest expense, efficient use of capital, engineering, design and construction services thereby avoiding significant premiums where demand for equipment and services exceed supply by a factor of two or more.

Actions Selected

Proactive Advocacy

1. Meet with EPA in early stages to share thoughts.
2. Open dialogue with all levels of EPA to communicate information and concerns.
3. Respond to EPA requests for information.

GOAL #1, OBJECTIVE #2 -- MACT Source Categories (cont.)

4. Develop data necessary to meet EPA's need and CMA's needs:

- ☐ sound technical reasons to not regulate SOCM as one source;
- ☐ industry cannot meet congressional mandates with current pollution equipment manufacturing capability; and

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Preliminary Meetings with EPA	36	10,800	8	10	1,200	1,200	--	0
Data Collection and Review	36	10,800	76	5	--	--	--	36,000
Respond to EPA Needs	36	10,800	70	10	0	0	--	0
Propose Sources (Preliminary)	72	21,600	140	10	--	--	--	12,000
Discuss Source Groupings (EPA)	72	21,600	28	5	1,200	1,200	--	30,000
Develop and Propose Schedule to EPA	36	10,800	70	10	0	0	--	0
Review EPA Responses	72	21,600	56	10	0	--	--	0
Totals	360	\$108,000	448	60	\$2,400	\$2,400	\$0	\$78,000

Responsibility

The Air Toxics Work Group will take the lead in promoting CMA's advocacy on this issue.

Performance Measures

1. Open dialogue with EPA (meetings and correspondence).
2. EPA acceptance of CMA suggestions/comments, etc., before EPA releases first written draft of source categories.
3. Respond to EPA requests for data.
4. Provide guidance to EPA on data needs, gaps and use of data.
5. CMA/EPA consensus on source categories.

**GOAL #1, OBJECTIVE #3
MACT STANDARDS FOR PROCESS VENTS,
STORAGE TANKS AND TRANSFER OPERATIONS**

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #3:

The development of Maximum Achievable Control Technology (MACT) standards for vents, storage and transfer operations which are technically feasible, performance based, and cost effective.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	1,740 Days
*O.P.S.	\$1,040,000
CMA Staff	2,362 Days
Company Travel	\$320,000
CMA Travel	\$18,000
*O.L.S.	\$130,000

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>			
Meet with EPA	AT	Minutes, reports	On-going			
Suggested technical approaches to EPA	AT	Minutes, reports	On-going			
Review and comment on EPA plans and proposals for Credit for Early Reduction Program	AT/PENWG	Meetings, comments	12/90-4/91			
Create generic MACT language: scope; records; reports; etc.	AT	Written proposal to EPA	(1) 6/30/91 Thru 11/30/92			
Review 50 proposed MACT standards for process vents	AT	Draft technical reports and comments	(2) 11/30/91 Thru 12/31/95			
Review 16 proposed MACT standards for transfer operations	AT	Draft technical reports and comments	(3) 11/30/91 Thru 12/31/95			
Review 11 proposed MACT standards for storage operations	AT	Draft technical reports and comments	(4) 11/30/91 Thru 12/31/95			
AT-Air Toxics Work Group PENWG- Permitting, Enforcement and Nonattainment Work Gr						
<u>Schedule of Expenditure</u> <u>(% of Total by Fiscal Year)</u>						
<u>CONTRACTOR</u>	<u>COSTS</u>	<u>90/91</u>	<u>91/92</u>	<u>92/93</u>	<u>93/94</u>	<u>94/95</u>
(1)	\$ 20,000	0%	100%	0%	0%	0%
(2)	\$750,000	10%	30%	30%	20%	10%
(3)	\$160,000	0%	40%	20%	20%	20%
(4)	\$110,000	0%	40%	20%	20%	20%
<u>CMA RESOURCE BREAKDOWN</u>						
	<u>STAFF</u> <u>(Days)</u>	<u>TRAVEL</u> <u>(\$)</u>	<u>O.P.S./O.L.S.</u> <u>(\$)</u>			
<u>TECHNICAL</u>						
Environmental	1,812	9,000	1,040,000			
<u>LEGAL</u>	550	9,000	130,000			

GOAL #1, OBJECTIVE #3 - MACT STANDARDS FOR PROCESS VENTS, STORAGE TANKS AND TRANSFER OPERATIONS

Description of Issue

The Clean Air Act requires EPA to develop MACT standards for all categories of major sources of hazardous air pollutants. Process vents, transfer operations, storage tanks, equipment leaks, and wastewater operations are five sources of emissions of hazardous air pollutants from chemical manufacturing facilities. EPA currently plans to develop technology standards for these sources as part of the overall MACT standards for chemical manufacturing source categories.

Elements in the MACT standards of concern to the chemical industry include:

- ☐ applicability determination, including de minimis cutoffs;
- ☐ technology-based emission standards -- may be performance standards or work practice/operation requirements;
- ☐ emissions monitoring and test procedures for demonstrating compliance; and
- ☐ recordkeeping and reporting requirements.

The Air Toxics Work Group will focus advocacy efforts on all elements of MACT standards development for process vents, transfer operations, and storage tanks¹. The Air Toxics Work Group will also be initially responsible for advocacy efforts on any additional emissions sources (except equipment leaks and wastewater operations) identified by EPA in the future.

Importance to Industry

Virtually all chemical manufacturing facilities have process vents, transfer operations, and/or storage tanks. Therefore, chemical manufacturing facilities that are major sources will be required to implement the MACT standards for these sources. Major sources are defined as facilities emitting greater than 10 tons per year (tpy) of any ~~single~~ Hazardous Air Pollutants (HAPs) or 25 tpy of all HAPs combined.

Criteria for Success

The MACT standards for process vents, transfer operations, and storage tanks should:

- ☐ Specify performance standards whenever possible instead of specifying a particular technology;
- ☐ Include de minimis cutoffs;
- ☐ Take into account differences in chemical processes to the extent that these differences suggest different control approaches;

¹The Fugitive Emissions Work Group will lead advocacy efforts on the MACT standards for equipment leaks. The Secondary Emissions Work Group will lead advocacy efforts on the MACT standards for wastewater operations. (See Goal 1, Objective 4 & 5)

**GOAL #1, OBJECTIVE #3 --MACT Standard for Process Vents,
Storage Tanks and Transfer Operations (cont.)**

- ☐ Be phased in over time across the chemical manufacturing industry;
- ☐ Be easy to understand and to implement;
- ☐ Balance the costs and benefits; and
- ☐ Contain reasonable recordkeeping and reporting requirements.

Timing

EPA has informed CMA of their intention to regulate process vents, transfer operations, and storage tanks at chemical manufacturing facilities as part of the first set of MACT standards to be issued within 2 years of enactment. EPA has already begun work on these MACT standards in anticipation of the Clean Air Act reauthorization. Their current rulemaking schedule calls for proposal of MACT standards for at least 40 source categories by November 1992.

Options

1. **Regulatory Negotiations (Reg-Neg)** -- CMA could encourage EPA to enter into a regulatory negotiation with CMA and other affected groups for any or all of the MACT standards.
2. **Proactive advocacy methods** -- CMA could conduct proactive advocacy by providing information and scheduling periodic discussions with EPA throughout the standards development period, as well as through comment and testimony.
3. **Traditional advocacy methods (Reactive)** -- CMA could approach advocacy in a traditionally reactive manner by providing comments and testimony on proposed regulations.
4. **No action** -- CMA could take no advocacy position whatsoever on EPA's MACT standards development activities.

Barriers and Opposition

EPA feels that their tight regulatory development schedule precludes close coordination with CMA during the rulemaking period. Information on alternative approaches identified by CMA that might otherwise be considered by EPA may be disregarded because of the impact on the rulemaking schedule. To be successful, CMA must bring information forward to the Agency on alternative approaches as early as possible in the rulemaking process. CMA's ability to do this will depend on the availability of resources, including CMA staff, member company, and outside purchased services.

As always, one key to EPA developing sound technology-based standards will be an adequate data base. Because EPA has adopted a tight schedule for developing MACT standards, it will be impossible for them to develop a comprehensive data base of up-to-date information related to process vents, transfer operations, and storage tanks. In fact, EPA has indicated that new information is being collected only for transfer operations and only from 9 companies. Consequently, there will be a lot of pressure placed on CMA to voluntarily provide up-to-date information to EPA to ensure that MACT standards are based on the most recent, representative industry data. CMA's ability to provide the necessary information will depend on the member companies' willingness and ability to provide resources (manpower and money) to produce the needed data.

**GOAL #1, OBJECTIVE #3 -- MACT Standards for Process Vents,
Storage Tanks, and Transfer Operations (cont.)**

Cost and Benefit

Compliance costs for MACT standards on process vents and storage tanks, will be substantial. Successfully advocating requirements for cost effective controls and reasonable recordkeeping and reporting requirements will minimize compliance costs. Savings on the order of several hundred million dollars may be realized with successful advocacy.

Actions Selected

Proactive Advocacy

1. Meet with EPA in early stages to share thoughts, identify concerns, and formulate strategies to advance CMA positions.
2. Open and maintain dialogue with EPA at all levels.
3. Identify areas where CMA can contribute to EPA activities (technical resources, data, etc.).
4. Identify technical reasons to support CMA positions.
5. Propose to EPA methods and ideas on how equipment, processes, etc. should be grouped for regulation.
6. Draft regulations for EPA that advance CMA positions with respect to:
 - ☐ types of control;
 - ☐ level of control;
 - ☐ efficiencies;
 - ☐ de minimis cutoffs;
 - ☐ applicability;
 - ☐ schedule;
 - ☐ alternative control devices;
 - ☐ recordkeeping;
 - ☐ reporting;
 - ☐ test methods; and
 - ☐ appropriate consideration of cost effectiveness in setting regulations, e.g., use of TRE equations.

**IAL #1, OBJECTIVE #3 -- MACT Standards for Process Vents,
Storage Tanks and Transfer Operations (cont.)**

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Generic Language MACT Standards	208	24,000	140	250	6,000	40,000	20,000
MACT Process Vents	900	225,000	1,050	100	4,000	20,000	750,000
MACT Transfer Operations	400	33,000	448	100	4,000	20,000	160,000
MACT Storage	132	20,000	154	50	4,000	20,000	110,000
Challenge of final rules	100	18,000	20	50	--	30,000	--
Totals	1740	\$320,000	1,812	550	\$18,000	\$130,000	\$1,040,000

Responsibility

As discussed previously, the Air Toxics Work Group will take the lead in promoting CMA's advocacy on all elements of the MACT standards for process vents, transfer operations, and storage tanks. The Air Toxics Work Group will coordinate with the Fugitive Emissions Work Group and Secondary Emissions Work Group on aspects of the MACT standards advocacy that are of common concern.

Performance Measures

1. Open dialogue with EPA (meetings and correspondence); share information.
2. EPA acceptance of CMA input/comments/suggestions before EPA releases first written drafts of regulations, etc.
3. EPA staff visits to member company plants.
4. CMA consensus on issues (sub-issues).
5. Communications to member companies in timely manner.

GOAL #1, OBJECTIVE #4 **MACT STANDARDS FOR WASTEWATER TREATMENT**

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #4:

Advocate for an acceptable definition of MACT for wastewater treatment which allows adequate time for compliance.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	840 Days
*O.P.S.	\$344,000
CMA Staff	870 Days
Company Travel	\$106,000
CMA Travel	\$11,400
*O.L.S.	\$210,000

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Meetings with EPA (three)	SEWG	Minutes	On-going
Develop sub-categories/ divisions for SOCM1 to advo- cate to EPA	ATWG	Reports, written proposal	1/91
Review industry 114 re- sponses	SEWG	Strategy	2/91
Draft CMA control options and target options and target efficiencies, emphasizing con- cerns with generic MACT will not work.	SEWG	Strategy	2/91
Review Method 25D proce- dures	SEWG EMTG	Strategy	6/91
Develop emission data for waste water treatment units	SEWG	Contractor database	(1) 11/90
Develop emission data for collection system components	SEWG	Contractor database	(2) 12/91
Decide Reg-Neg participation	SEWG	Strategy	3/91
Develop estimating tech- niques for collection system emissions	SEWG	Contractor report	(3) 8/92
Regulatory Negotiation	SEWG	Negotiated rule	6/92
Comment on proposed regula- tions	SEWG	Comments	1/92
Review final rules	SEWG	Summary/evaluation	11/92
Programs to Assess Volatile Emissions (PAVE) upgrades	SEWG	Contractor service	(4) 6/93
SEWG-Secondary Emissions Work Group ATWG-Air Issues Task Group EMTG - Environmental Monitoring Task Group			
<u>CONTRACTOR</u>	<u>COSTS</u>	<u>FISCAL YEAR</u>	
(1)	\$ 24,000	1990/91	
(2a)	\$ 50,000	1990/91	
(2b)	\$200,000	1991/92	
(3a)	\$ 25,000	1991/92	
(3b)	\$ 25,000	1992/93	
(4)	\$ 20,000	1992/93	
<u>CMA RESOURCE BREAKDOWN</u>			
<u>TECHNICAL</u>	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S./O.L.S (\$)</u>
Environmental	770	5,400	344,000
<u>LEGAL</u>	100	6,000	210,000

GOAL #1, OBJECTIVE #4 -- MACT STANDARDS FOR WASTEWATER TREATMENT

Description of Issue and Importance to Industry

The Clean Air Act Amendments will result in stringent emission controls for Air Toxics. Secondary emissions (SE) of volatile organic compounds (VOC) from industrial wastewater will require control if plant emissions exceed 10 tpy for any combination of the list of 189. EPA has not shared their vision for MACT relative to SE, but if they reiterate Control Technology Guidance (CTG), the Chemical Industry will be required to either cover or seal all wastewater collection systems and treatment units prior to biological units. Alternatively, VOC's can be removed by steam distillation before discharge into sewer system. Both options will be very costly.

Criteria for Success

1. EPA adoption of CMA estimating protocols for SE.
2. Cost-effective control requirements.
3. Definition of MACT for WWT that is acceptable to CMA Member Companies.
4. EPA acknowledgement that biological degradation is acceptable treatment method.
5. Reasonable compliance schedule for MACT.
6. Ideally, current BDT WWT practice is acceptable.

Timing

CAA Legislation	11/90
MACT Proposal	11/91
MACT Promulgation	11/92
Compliance/Implementation	11/95

Options

1. Traditional advocacy methods (Reactive) -- CMA could conduct reactive advocacy by commenting only after proposal, and litigating after promulgation.
2. Proactive advocacy methods -- CMA could conduct proactive advocacy by drafting their own version of regulations and by actively participating in regulatory negotiations.

GOAL #1, OBJECTIVE #4 - MACT Standards for Wastewater Treatment (cont.)

Barriers and Opposition

Some barriers to advocating an acceptable definition of MACT for wastewater treatment that allows adequate time for compliance include:

- ☐ possible reluctance by EPA to discuss the issue;
- ☐ insufficient funds and/or manpower to complete projects;
- ☐ environmental lobby groups pushing for technology forcing standards for which technology does not exist; and
- ☐ a two year rule making schedule limits time to interact with EPA.

Cost and Benefit

Compliance costs for wastewater MACT standards will be substantial. Costs ~~savings of as~~ much as several hundred million dollars could be realized if advocacy is successful in producing ~~cost-effective~~ control requirements, reasonable test methods, and efficient recordkeeping and reporting requirements.

Actions Selected

Proactive advocacy.

GOAL 1, OBJECTIVE #4 -- MACT Standard for Wastewater Treatment (cont.)

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchaser Service (\$)
Meetings w/EPA (three)	24	4,500	9	10	2,400	2,400	10,000	-
Review industry 114 responses	24	4,500	20	5	-	-	-	-
Draft SE Control Options	96	12,000	78	5	-	-	-	-
Review Method 25D procedures	32	8,000	52	4	-	-	-	-
Develop database for WWT Units (literature)	8	4,000	18	3	-	-	-	24,00
Develop data base for collection system (measurement)	16	8,000	26	3	-	-	-	250,00
Reg-Neg Participation	576	54,000	470	45	3,000	3,600	200,000	-
Develop Estim. Technique for collection system	48	8,000	40	-	-	-	-	50,00
PAVE upgrade	-	-	-	-	-	-	-	\$20,00
Comment on proposed regula- tions	16	3,000	57	20	-	-	-	-
Review final rule	-	-	-	5	-	-	-	-
Totals	840	\$106,000	770	100	\$5,400	\$6,000	\$210,000	\$344,00

Responsibility

SE Work Group has responsibility for most of the actions/projects. Liaison with Monitoring WG will also be important relative to VOC Test Method 25D.

Performance Measures

1. Adoption of CMA protocols to estimate SE.
2. Acceptance by EPA of CMA database.
3. Acceptance by EPA of biological degradation as equivalent to distillation.

**GOAL #1, OBJECTIVE #5
MACT STANDARDS FOR EQUIPMENT LEAKS**

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #5:

Advocate for MACT standards for equipment leaks that reduce emissions while being economically and technically feasible.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	60 Days
*O.P.S.	none
CMA Staff	70 Days
Company Travel	\$22,000
CMA Travel	\$1,200
*O.L.S.	0

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Review proposed and final MACT standards for consistency with negotiated agreement and comment and/or litigate as appropriate.	FEWG	Comments, written recommendations	Fall 1991 Fall 1992
FEWG-Fugitive Emissions Work Group			
<u>CMA RESOURCE BREAKDOWN</u>			
	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S./O.L.S. (\$)</u>
TECHNICAL			
Environmental	40	600	0
LEGAL	30	600	0

GOAL #1 OBJECTIVE #5 - MACT STANDARDS FOR EQUIPMENT LEAKS

Description of Issue

EPA is developing standards for equipment leaks through a negotiated rulemaking process. These standards will be issued as part of the MACT standards for chemical manufacturing facilities under the new Clean Air Act. The MACT standards will be potentially applicable to 189 hazardous air pollutants listed in the new Clean Air Act. These standards may also be used to replace existing NSPS, NESHAP, RCRA, and State rules.

Importance to Industry

Emissions from leaking equipment represent on average 60% of the emissions from a chemical process unit. Therefore, EPA is expected to continue to focus regulatory attention on this emission source within chemical manufacturing facilities.

Criteria for Success

Success will be achieved in the regulatory negotiation process if the promulgated rules result in reduced emissions from equipment leaks while:

- ☐ being economically and technically feasible;
- ☐ containing performance standards instead of technology standards;
- ☐ resulting in quantifiable emission results;
- ☐ providing flexibility for alternative means of compliance;
- ☐ rewarding good performers;
- ☐ having reasonable compliance schedules; and
- ☐ being easy to understand and implement.

Timing

The regulatory negotiations are expected to be completed by early 1991. EPA plans to promulgate regulations on the basis of the negotiated agreement within two years of enactment. The agreement is expected to contain a staggered schedule for implementing the equipment leak regulations to all SOCM facilities within a 12-month period. Thus, all affected facilities will have to begin implementing the equipment leak regulations within three years of enactment.

Options

1. **Regulatory Negotiations** -- Continue participation in the regulatory negotiation process already underway. This process has been successful to date.
2. **Discontinue Regulatory Negotiation** -- Discontinue negotiations and permit EPA to develop regulations. CMA input would be limited to comment and/or testimony on the proposed regulation.

GOAL #1, OBJECTIVE #5 -- MACT Standard for Equipment Leaks (cont.)

Barriers and Opposition

Environmental groups favor "technology forcing" MACT standards. This objective must be balanced in the negotiated agreement for equipment leaks.

Cost and Benefit

Benefits of the emerging agreement include:

- ☐ avoidance of technology requirements;
- ☐ reduced monitoring frequency for good performance; and
- ☐ avoidance of enforceable violations.

The cost savings associated with these features is expected to exceed \$50 million annually.

Actions Selected

Continue participation in the regulatory negotiation.

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Review/comment on proposed and final regulations	60	22,000	40	30	600	600	0	0
Total	60	\$22,000	40	30	\$600	\$600	\$0	\$0

Responsibility

Fugitive Emissions Work Group with assistance from former members of the BENZ Work Group.

Performance will be judged on the basis of the quality of the adopted regulations.

GOAL #1, OBJECTIVE #6 EQUIPMENT LEAK EMISSION FACTORS

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #6:

Advocate for revision of existing EPA emission factors for equipment leaks and identification and promotion of implementation by member companies of low equipment leak emissions performance technology and operating practices.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	360 Days
*O.P.S.	\$125,000
CMA Staff	282 Days
Company Travel	\$140,800
CMA Travel	\$3,600
*O.L.S.	\$0

*(Outside Purchase Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Build POSSEE database through cooperative efforts of FEWG, CMA CHEMSTAR Panels, and API	FEWG	Industry-wide database of equipment leak data	(1) Present to (2) mid-1993
Perform analysis of POSSEE database	FEWG	Contractor report/CMA analysis identifying low emission performance technology and improved emission estimation tools	(3) 1991-1994 (4) (5)
Communicate results of POSSEE database analysis with EPA	FEWG	Minutes, written comments	1991-1994
FEWG-Fugitive Emissions Work Group POSSEE - Plant Organizational Software System for Emissions from Equipment			
<u>CONTRACTOR</u>	<u>COSTS</u>	<u>FISCAL YEAR</u>	
(1a)	\$ 6,000	1990/91	
(1b)	\$ 9,000	1991/92	
(2a)	\$ 3,000	1990/91	
(2b)	\$ 7,000	1991/92	
(3)	\$60,000	1991/92	
(4)	\$20,000	1992/93	
(5)	\$20,000	1993/94	
<u>CMA RESOURCE BREAKDOWN</u>			
	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S./O.L.S. (\$)</u>
TECHNICAL			
Environmental	192	1,800	125,000
LEGAL	90	1,800	—

GOAL #1, OBJECTIVE #6 -- EQUIPMENT LEAK EMISSION FACTORS

Description of Issue

Measurement and quantification of emissions from leaking equipment and what technology options represent low emission performance technology will continue to be of interest to chemical manufacturing facilities because of SARA and other factors. In addition, accurate emission factors for equipment leaks will be an important element for several provisions of the new Clean Air Act including credit for early reduction demonstrations and residual risk determinations.

Importance to Industry

Accurate quantification of emissions from equipment leaks is necessary to increase the public's confidence in release estimates. Furthermore, improved emission factors may help facilities to take advantage of negligible risk and credit for early reduction provisions in the new Clean Air Act. More accurate emission factors will be a crucial element when EPA performs residual risk determinations in the future. If emission factors overestimate fugitive emissions, facilities will be required to adopt additional controls for no reason. The identification of low emission performance technology options will facilitate compliance with the performance-based standards.

Criteria for Success

Success will be achieved if EPA revises the existing emission factors based on information provided by CMA and if low emission performance technology and operating practices are identified and implemented by the member companies.

Timing

Efforts toward improving emission quantification methods are expected to be needed throughout the five year planning period. In the short-term (in the next one to two years), improved emission factors would be useful to facilities making credit for early reduction demonstrations. They will be essential for the residual risk determination step (approximately seven-eight years after enactment). The MACT standards for equipment leaks will require the identification of low emission performance technology within two to three years after enactment. To meet this goal, the group will need to collect, analyze, and communicate information on low emission performance technology over the next two to three years.

Options

1. **Collect Information Proactively** -- CMA has already started the development of a data base (Plant Organizational Software System for Emissions from Equipment, called POSSEE) to support this issue. API has recently indicated a desire to participate cooperatively in the POSSEE system. The CHEMSTAR panels also have ongoing efforts in the emission quantification area which need to be encouraged and incorporated into our advocacy efforts. We will need to follow through with the development and analysis of this data base and present the results to EPA in a timely manner.
2. **No Action** -- Accept existing emission factors and leave it up to individual companies to identify low emission performance technology to meet their compliance needs.

Barriers and Opposition

Lack of fiscal support for POSSEE would be one barrier to successful advocacy on this issue. Another barrier would be if insufficient data are collected through POSSEE, or data are of poor quality.

GOAL #1, OBJECTIVE #6 -- Equipment Leak Emissions Factors (cont.)

Cost and Benefit

Benefits of successful advocacy would include:

- ☐ appropriate application;
- ☐ accurate credit for early reduction demonstrations; and
- ☐ cooperative industry wide effort to collect information on low emissions performance technology, reducing the burden on individual companies.

The cost savings from avoidance of residual risk standards for 10% of the industry alone is estimated to be \$500 million dollars between 1995 and 2005.

Actions Selected

Continue efforts to build and analyze an industry-wide data base through POSSEE, and communicate the results to EPA and the membership.

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (Days)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Build POSSEE database	120	55,000	78	30	0	0	0	25,000
Analyze POSSEE database	160	73,000	102	30	600	600	0	100,000
Communicate POSSEE results to EPA	80	12,800	12	30	1,200	1,200	0	0
Totals	360	\$140,800	192	90	\$1,800	\$1,800	\$0	\$125,000

Responsibility

Fugitive Emissions Work Group in coordination with CMA CHEMSTAR Panels.

Performance Measures

Performance will be judged on whether CMA is successful in collecting, evaluating, and communicating needed information and whether EPA revises their emission factors to take into account the information.

GOAL #1, OBJECTIVE #7 NSPS/CTG REGULATIONS

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #1:

Advocate for the development of reasonable New Source Performance Standards (NSPS).

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	390 Days
*O.P.S.	none
CMA Staff	466 Days
Company Travel	\$30,000
CMA Travel	\$3,600
*O.L.S.	\$110,000

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Meet with EPA	NSPS	Consensus of objectives/EPA initiatives (minutes)	6/91
Review current NSPS	NSPS	Comments	12/91
Review new NSPS	NSPS	Comments	On-going
Review new/revised CTGs	NSPS	EPA 114 Letters database comments	On-going
Review MACT standards	AT	Comments	2, 4, 7, 10 years as approp.
Review de minimis cutoffs	AT	Comments	As approp.
Review credit for early reduction	AT	Comments	As approp.
Review acid rain	NSPS	EPA 114 Letters database comments	As approp.
Review enforcement	PENWG	Comments	As approp.
NSPS-New Source Performance Standards Work Group AT-Air Toxics Work Group PENWG-Permitting, Enforcement and Nonattainment Work Group			
<u>CMA RESOURCE BREAKDOWN</u>			
	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S./O.L.S. (\$)</u>
<u>TECHNICAL</u>			
Environmental	216	1,200	0
<u>LEGAL</u>	250	2,400	110,000

GOAL #1, OBJECTIVE #7-- NSPS/CTG REGULATIONS

Description of Issue and Importance to Industry

The pending amendments to the Clean Air Act leave intact EPA's New Source Performance Standards (NSPS) program. Currently, there are approximately one-dozen pending NSPS; clearly, more are to come. The expected NSPS regulations will require significant expenditure by the Chemical Industry.

The NSPS Work Group proposes to advocate the development and promulgation of regulations for the chemical manufacturing industry which reflect the industry's concerns in EPA's establishment of:

- ☐ Title I (Nonattainment) issues such as current and planned NSPS rules, new NSPS rules, and new and revised Control Technology Guidance (CTGs);
- ☐ Title III (Air Toxics) issues such as when industry may be required to employ "modifications" which trigger new source requirements, use of different control technologies to limit or prevent emissions and the prevention of extreme cases of over-control, setting of limits where specific requirements apply to minor sources within a facility, control technology-control equipment availability - vs. - EPA's MACT phase-in schedules, determinations of de minimus increase in emissions for defining "modifications" (standards for new and existing sources are expected to be the same, where as de minimus cutoffs, size cutoffs, etc., will be evaluated as part of the regulatory alternatives), NSPS for solid waste incinerators, and regulatory guidance on credit for early reduction programs;
- ☐ Title IV (Acid Rain) issues such as inclusion of industrial units (in possible NSPS for NOx emissions from electric utility steam generating units); and
- ☐ Title VII (Enforcement) issues such as general guidance and source compliance certification guidelines.

Criteria for Success

1. Promulgation of performance-based standards.
2. Promulgation of alternative means of compliance.
3. Promulgation of reasonable compliance schedules: including reasonable time frame for industry compliance when NSPS are proposed many years before the promulgation of final regulations.
4. Establishment of on-going dialogue with EPA and NSPS WG, and CMA members.
5. Participation in EPA Control Technology Guidance, both new and revised, which reflects actual performance in appropriate applications in industry.

Timing

CAA Legislation	11/90
Current/Proposed NSPS rules	
Generic standards (proposed)	10/91
Generic standards (promulgated)	11/92
MACT Standards (promulgated)	
40 categories	12/92
25%	12/94
50%	12/97
100%	12/00

For waste combustors, EPA must finalize NSPS (MACT) standards by 12/94.

VVV 000004970

GOAL #1, OBJECTIVE #7 -- NSPS/CTG Regulations (cont.)

Options

Proactive Advocacy

1. Participate in development/drafting of regulations.
2. Influence the drafting of regulations.
3. Comment on proposed regulations/CTGs.
4. Participate in the development of information/data used to prepare CTGs.

Reactive Advocacy

1. Provide comments to EPA related to proposed regulations/CTGs.
2. Provide support in litigation efforts.

Barriers and Opposition

Some of the barriers to obtaining reasonable NSPSs are:

- ☐ EPA insists on built-in technology forcing MACT standards;
- ☐ EPA acts independently of CMA input;
- ☐ lack of resources at CMA;
- ☐ adverse economic conditions; and
- ☐ lack of performance - based information.

Cost and Benefit

Successful advocacy on this issue will result in cost savings associated with reasonable, flexible performance standards instead of prescribed technology standards. Estimated cost savings could be as much as 50 million dollars between 1992 and 1998.

Actions Selected

1. Data Collection for EPA 114 letters.
2. Develop database for CMA strategy.
3. Coordinate MACT Strategy with Air Toxics Work Group to develop a CMA strategy.
4. Comments.

GOAL #1, OBJECTIVE #7 -- NSPS/CTG Regulations (cont.)

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Service (\$)	Outside Purchased Service (\$)
(1) Meeting w/EPA	18	5,000	8	20	1,200	1,200	--	--
(2) Current NSPS	--	--	--	30	0		10,000	--
(3) New NSPS	290	25,000	104	50	0		40,000	--
(4) New/Revised CTGs	60	--	64	50	0		60,000	--
(5) MACT Standards	1	--	6	15	0		--	--
(6) De minimis/cut-offs	1	--	6	15	0		--	--
(7) Regulatory guidance/Early reduction	1	--	6	15	0		--	--
(8) Acid Rain	18	--	16	40	0		--	--
(9) Enforcement Guidelines	1	--	6	15	0	1,200	--	--
Totals	390	\$30,000	216	250	\$1,200	\$2,400	\$110,000	--

Responsibility

The NSPS WG has responsibility for the development/review of current NSPS, new NSPS, new/revised CTGs, and Acid Rain regulations.

The lead on MACT standards, and de minimis cut-off, is the responsibility of the Air Toxics WG, with participation by the NSPS WG as appropriate.

The lead on enforcement issues is the responsibility of the Permitting, Enforcement and Nonattainment WG with participation by the NSPS WG on an "as-needed" (support) basis.

Performance Measures

1. Quality and quantity of data collected (database).
2. Number of CMA comments submitted which result in changed EPA position (effective influence).
3. Number of "Wins" achieved.
4. Number of training opportunities (workshops) provided to member companies.

GOAL #1, OBJECTIVE #8 NONATTAINMENT ISSUES

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #8:

Advocate for the promulgation of nonattainment regulations that target sources which are major contributors to the problem, contain reasonable requirements, recognize voluntary emissions reductions and are cost effective.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	855 Days
*O.P.S.	none
CMA Staff	961 Days
Company Travel	\$231,000
CMA Travel	\$11,300
*O.L.S.	\$120,000

*(Outside Purchased Services
Outside Legal Services)

ACTIONS	RESP. GROUP	WORK PRODUCT	TIMING
Identify issues of concern or interest	PENWG	Issue papers or other appropriate records	On-going
Identify major players and target contacts	PENWG	List of contacts	On-going
Arrange to have appropriate dialogue with target contacts	PENWG	Meeting scheduled and agenda prepared or appropriate oral/written communication transmitted	On-going
Meet with target contacts and provide input on CMA positions	PENWG	Meeting minutes and position identification	Within 7 days of meeting
Review draft/proposed guidance regulations	PENWG	Issues of concern identified	Within 30 days of receipt
Decide whether to prepare written comments/testimony	PENWG	Written CMA comments/testimony or input to other organization or no work product	By end of comment period or as timely if no specified comment period
Decide whether to provide oral testimony to Agency	PENWG	Oral testimony or no work product.	As timely
Review final regulations	PENWG	Recommendations on litigation	Within 20 days of issuance or as timely
Determine information needs	PENWG	Budget request or project assignment	On-going
Monitor on-going situation and highlight significant developments	PENWG	Communication to appropriate people	On-going

PENWG-Permitting, Enforcement and Nonattainment Work Group

CMA RESOURCE BREAKDOWN

	STAFF (Days)	TRAVEL (\$)	O.P.S./O.L.S. (\$)
TECHNICAL			
Environmental	686	7,100	0
LEGAL	275	4,200	120,000

GOAL #1, OBJECTIVE #8 - NONATTAINMENT ISSUES

Description of Issue

The Clean Air Act will result in major new requirements on sources located in nonattainment areas. These requirements range from inventory requirements to mandated percentage reductions of emissions of volatile organic compounds (VOCs), nitrous oxide (NO_x) or carbon monoxide (CO). Expansion of sources in nonattainment areas may be difficult, if not impossible due to the more stringent offset requirements. Availability of offsets will be limited due to other mandates such as percentage emission reduction requirements and more stringent emission limitations from CTGs and MACT.

Nonattainment sub-set issues include:

- ☐ Offset Requirements, e.g., Ratio & Actual vs. Allowable;
- ☐ Netting Issues;
- ☐ Permitting Guidelines/Requirements;
- ☐ SIP Revision Regulations;
- ☐ Nonattainment Area Boundary Determination Guidelines;
- ☐ Permit Fees;
- ☐ Sanctions;
- ☐ Inventory Preparation Guidance;
- ☐ % Reduction Requirement-Federal Policies;
- ☐ Credits for Early Reduction Policy/Guidance;
- ☐ State Delegation/FIP Issue;
- ☐ Major Source Definition Issue;
- ☐ Generic Control Requirements/Levels;
- ☐ EPA Nonattainment Policies;
- ☐ Maintenance Plan Requirements;
- ☐ Visibility Policy;
- ☐ Reclassification Policies/Maintenance Plan;
- ☐ Ambient Monitoring Policy;
- ☐ Source Monitoring Requirements/Policy; and
- ☐ VOC/NO_x Tradeoffs.

Importance to Industry

Greater than 65% of CMA member company facilities are located in areas classified as not attaining the National Ambient Air Quality Standards. The 1990 Clean Air Act will expand existing nonattainment area boundaries, drawing in an even larger percentage of the industry. More stringent State Implementing Plan requirements will limit chemical industry expansion. They will also limit chemical industry customer and product growth. Requirements for the control of emissions of a facility within nonattainment areas will increase the cost of operating of facilities located in these areas and could disrupt competitiveness with facilities in attainment areas and in international markets.

Criteria for Success

The federal regulations target sources which are major contributors to the problem, i.e., equitably address chemical industry emissions in context of total emissions; contain reasonable requirements and schedules which allow modification/construction of industrial source as needed; are cost effective; and recognize and give credit for voluntary emission reductions in the percent reduction program.

GOAL #1, OBJECTIVE #8 - Nonattainment Issues (cont.)

Timing

Some nonattainment area requirements, such as preparation of inventories, will be implemented within one year of enactment of the amended CAA. Other requirements such as revised SIP submittals or imposition of new CTG requirements will take place two-three years after enactment. Guidance/policy/regulation to implement the new or additional nonattainment area requirements will generally be issued in the first one-two years after enactment.

EPA is currently formulating policy to address nonattainment area issues.

Options

1. Do nothing.
2. Read/follow the issue but take no overt action to influence outcome of the issue.
3. Read/follow and provide assistance to another association/group to influence the outcome of the issue.
4. Read/follow and take overt action to influence the outcome of the issue.

The CMA Permitting Enforcement Work Group plans to invoke Options three or four depending on the issue and the action deemed appropriate on each issue.

Barriers and Opposition

Timing - The significant number of new regulations that must be issued over a short period of time will make EPA even less inclined to make changes to proposed rules. Rules will be pushed through the system to try to meet statutory timetables.

Resources - Company resources needed just to comply with requirements may distract resources from advocacy efforts.

Associations/groups not immediately impacted may be willing to sit back and wait to see what happens to the precedent setting regulations in the chemical industry. Selling CMA positions to the regulators and the public may rest to a large extent on other association's support.

Attitudes - EPA's efforts to remove state flexibility and to oversee every activity in delegated programs will be a barrier to cost effective, timely, and reasonable nonattainment area requirements.

Environmental groups and the public in general will want more stringent, less flexible regulations. They want zero emissions. They also want more and more information disclosed regarding operations and emissions, and want to say if, how, and when facilities are operated and constructed.

States want EPA to tell them what they must do so they do not have to shoulder the burden of imposing stringent nonattainment area requirements.

CMA will not be the only interest group seeking to influence the outcome of the regulations.

Affiliations with other trade groups may not be strong enough to assure "industry" speaks with one position.

GOAL #1, OBJECTIVE #8 -- Nonattainment Issues (cont.)

Cost and Benefit

The nonattainment aspects of the reauthorized CAA will impact >65% of CMA member company facilities. The costs of the nonattainment provisions will be substantial as areas are required to reduce VOC emissions by 33-66% from where they are now. In addition what is required in nonattainment areas will set the floor for what could be determined to be MACT under air toxics. Other policies established for nonattainment will also have important precedent setting aspects.

The cost/benefit on an item to item basis cannot be determined at this time but the return on the hours CMA projects to invest in this issue should be positive.

Actions Selected

1. Meet with EPA and determine their position and plans.
2. Review draft and proposed regulations.
3. Submit comments or revised draft regulations.

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Work Group meetings/position development	270	\$154,000	250	70	0		--	0
Preparation of Comments	450	0	316	120	0		90,000	0
Meetings with EPA and other trade associations	135	\$77,000	120	50	7,100	4,200	--	0
Litigation, if necessary	--	--	--	35	--		30,000	--
Totals	855	\$231,000	686	275	\$7,100	\$4,200	\$120,000	\$0

Responsibility

The primary responsibility for all elements concerning nonattainment policy rests with the Air Permitting and Enforcement Work Group. Elements of the nonattainment regulations regarding modelling, monitoring, or specific control technique requirements are handled by other CMA groups.

Performance Measures

Performance will be measured by inclusion in EPA policy and regulations of reasonable requirements and schedules and consideration of cost effectiveness and voluntary reductions.

VVV 000004976

**GOAL # 1, OBJECTIVE # 9
PERMITTING ISSUES**

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #2:

Advocate for the development of a federal permit program that allows and encourages states to avoid multiple permits for the same source; contains reasonable application requirements and schedules; encourages permit issuance in a timely and cost effective manner; embraces rather than replaces good state permit program elements; and recognizes and encourages voluntary and innovative control efforts.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	885 Days
*O.P.S.	\$35,000
CMA Staff	1031 Days
Company Travel	\$241,000
CMA Travel	\$14,300
*O.L.S.	\$100,000

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP LEAD SUPPORT</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Identify issues of concern or interest	PENWG/SAC	Issue papers or other appropriate records	(1) On-going
Identify major players and target contacts at EPA and in States	PENWG/SAC	List of contacts	On-going
Arrange to have appropriate dialogue with target contacts	PENWG/SAC	Meeting scheduled and agenda prepared or appropriate oral/written communications transmitted	On-going
Meet with target contacts at EPA and State agencies and provide input on CMA positions	PENWG/SAC	Meeting minutes and position identification	Within 7 days of meeting
Review draft/proposed guidance/regulations from EPA and priority States	PENWG/SAC	Issues of concern identified	Within 30 days of receipt
Decide whether to prepare written comments/testimony to EPA or State agencies	PENWG/SAC	Written CMA comments/testimony or input to other organization or no work product	By end of comment period or as timely if specified comment period.
Decide whether to provide oral testimony to EPA or State agencies	PENWG/SAC	Oral testimony or no work product	As timely
Review final regulations	PENWG/SAC	Recommendations on litigation	Within 20 days of issuance or as timely
Determine information needs	PENWG/SAC	Budget request or project assignment	On-going
Monitor on-going situation and highlight significant developments	PENWG/SAC	Communication to appropriate people	(2) On-going
PENWG-Permitting, Enforcement and Nonattainment Work Group SAC - State Affairs Committee			
<u>CONTRACTOR</u>	<u>COSTS</u>	<u>FISCAL YEAR</u>	
(1)	\$20,000	1990/91	
(2)	\$15,000	1990/91	
<u>SOURCE BREAKDOWN</u>			
	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S./O.L.S. (\$)</u>
<u>TECHNICAL</u>			
Environmental	581	7,100	35,000
<u>LEGAL</u>	350	4,200	100,000
<u>STATE AFFAIRS</u>	100	3,000	0

GOAL # 1, OBJECTIVE # 9 - PERMITTING ISSUES

Description of Issue

The Clean Air Act Amendments will result in new and additional permit requirements which will affect essentially all of the chemical industry. Some of the new requirements include specific permits for emissions of air toxics and new permit requirements in nonattainment areas. Permit fees of approximately \$25/ton of regulated pollutant will also be mandated. Due to the degree of EPA and public involvement in each permit, significant delays in obtaining permits are anticipated.

State programs are expected to be even more overloaded because of the new requirements. States must accept the new permit program and will have only a limited amount of time to review and submit Plans for permitting programs to EPA for approval. Although EPA has expressed an interest in retaining as much of each state's existing program as possible, it is probable that many states will require extensive Plan changes in order to meet the minimum requirements. If states fail to submit the plans on time or to submit approvable plans, industry may be subject to sanctions. States will likely have an influence on EPA's regulations and program requirements.

Permitting sub-issues to be followed include:

- ☐ Standard Application Form;
- ☐ EPA Permit Program Guidance for Nonattainment/Air Toxics/Accidental Releases;
- ☐ Permit Fee Guidance;
- ☐ Application Submittal Schedule;
- ☐ Completeness Determination Guidance;
- ☐ Recordkeeping/Reporting Guidance;
- ☐ SIP Revision Regulations;
- ☐ PSD Permitting Policy & Guidance (De minimis, Permit Applicability Regulations);
- ☐ Visibility Policy;
- ☐ Construction Permit/Operating Permit Interface Guidance;
- ☐ Public Notice/Public Hearing Procedures;
- ☐ Air Toxic Permitting Policy;
- ☐ Nonattainment Permitting Policy;
- ☐ Acid Rain Industrial Source Permitting Policy (Allowances);
- ☐ Area Source Permitting (Exc. Mobile Source) Policy;
- ☐ Permitting Exemptions (De Minimis, Source Type, e.g., labs);
- ☐ Generic Control Requirements/Levels;
- ☐ Permit Hammers; and
- ☐ Credit for early reduction.

Importance to Industry

The permitting provisions of the Clean Air Act Amendments will have a profound effect on the industry as a whole as well as on individual companies and facilities. Significant resources will need to be dedicated to new and expanded permitting activities to satisfy state and/or federal requirements. These include resources to review and understand revised state and federal regulations, implementing the technical and financial aspects of the new permit program, resources to handle public notice and potential comment on each permit requested, to protect permits once issued through possible citizen suits, and financial resources for fees on each ton of regulated pollutant. Because of the potential overlap of permitting requirements between PSD/nonattainment, air toxics, NSPS and NESHAPs, it is imperative that state permitting programs be streamlined as much as possible, in order to lessen the burden both on the regulated community and the regulatory agencies. Industry will otherwise face redundant and lengthy permit problems which could result at best in a no growth situation or in the worst case a noncompliance or shutdown situation.

GOAL #1, OBJECTIVE # 9 -- Permitting Issues (cont.)

Criteria for Success

The federal permit program avoids multiple permits for the same source, i.e., a separate state permit is not required for air toxics, for nonattainment, for NSPS, etc.; contains reasonable application requirements and schedules, i.e., criteria for application completeness is established; encourages permit issuance in a timely and cost effective manner, e.g., review times are established, fee calculations are based on justifiable criteria; embraces rather than replaces good state permit program elements already in existence, e.g., exemptions for some source categories and operations, flexibility to substitute chemicals within process units; and recognizes and encourages voluntary and innovative control efforts.

Timing

EPA is already drafting or is assimilating data to begin drafting regulations in support of the Clean Air Act Amendments. Therefore, the need for CMA meetings/discussions with EPA, STAPPA/ALPCO, priority State regulatory officials, and others which influence regulatory development is current.

Within 12 months of enactment, EPA will be required to propose the minimum standards/requirements of a permit program which states will then be required to include in their revised SIPS within a 2 year period.

Options

1. Do nothing.
2. Read/follow the issue but take no overt action to influence outcome of the issue.
3. Read/follow and provide covert assistance to another association/group to influence the outcome of the issue.
4. Read/follow and take overt action to influence the outcome of the issue.

The CMA Permitting/Enforcement Work Group plans to invoke Options 3 or 4 depending on the issue and the action deemed appropriate on each issue.

Barriers and Opposition

Timing - The significant number of new regulations that must be issued over a short period of time will make EPA even less inclined to make changes to proposed rules or guidance. Rules/guidance will be pushed through the system to try to meet statutory deadlines. States will be expected to modify existing permit programs or develop new programs within specified short time frames, which could limit industry's opportunities.

Resources - Company resources needed to just comply with requirements may distract resources from advocacy efforts.

Associations/groups not immediately impacted may be willing to sit back and wait to see what happens to the precedent setting regulations in the chemical industry. Selling CMA positions to the regulators and the public may rest to a large extent on other association support.

Attitudes - EPA's efforts to remove state flexibility and to oversee every activity in delegated programs will be a barrier to cost effective, timely, and reasonable permit requirements.

The legislative language developed by Congress may preclude some desirable permitting elements.

GOAL #1, OBJECTIVE # 9 -- Permitting Issues (cont.)

EPA staffers already have preconceived ideas regarding the regulatory language they want and changing their minds may be difficult.

CMA will not be the only interest group seeking to influence the outcome of the regulations.

Affiliations with other trade groups may not be strong enough to assure "industry" speaks with one position.

States want EPA to tell them what they must do so they do not have to shoulder the burden of defense on imposing stringent permit requirements.

Environmental groups and the public want more stringent less flexible permit requirements. They want zero emissions. They also want more information disclosed regarding operations and emissions, and they want a say in if, how and when facilities get construction and operating permits. These groups also want to judge the merits of issuing permits on abstract rather than technical criteria.

Cost and Benefit

The permitting aspects of the reauthorized CAA will impact all major sources. The costs of the program to industry are directly proportional to extent of and reasonableness of the new requirements. Cost/benefit on an issue by issue basis cannot be determined at this time. CMA forecasts investing in this issue are expected to be positive.

Actions Selected

1. Meet with EPA, and determine their position and plans, and provide input.
2. Review draft and proposed regulations.
3. Submit comments on revised or draft regulations, and on emerging positions.
4. Litigation, if necessary.

GOAL #1, OBJECTIVE # 9 -- Permitting Issues (cont.)

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA State Affairs Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	CMA State Affairs Travel (\$)	Outside Legal Services (\$)	Outside Purchase Services (\$)
Work Group meetings/ position development	420	\$154,000	254	80	90	0	0	0	--	\$35,000
Preparation of Comments	300	0	208	140	20	0	0	0	70,000	0
Meetings with EPA and other trade associations	135	\$77,000	119	70	0	7,100	4,200	0	--	0
Meeting with CICs and State regulatory agencies	30	10,000	10	10	50	0	0	3,000	0	0
Litigation, if necessary	--	--	--	50	0	0	0	0	30,000	--
Totals	885	\$241,000	581	350	100	\$7,100	\$4,200	\$3,000	\$100,000	\$35,000

Responsibility

The primary responsibility for all air permitting issues (including construction or operating permits for air toxics, nonattainment, attainment, NSPS, NESHAP, and acid rain) is assigned to the Permitting, Enforcement and Nonattainment Work Group (PENWG). The PENWG will coordinate with the State Affairs Committee on activities related to individual State permitting programs.

Performance Measures

Successful advocacy will be measured in terms of whether Federal/State permit programs contain features to ensure simple, straightforward permitting requirements that are consistent with existing programs and voluntary efforts.

**GOAL #1, OBJECTIVE #10
ENFORCEMENT ISSUES**

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #10:

Advocate for the establishment of enforcement criteria that are reasonable and fair, differentiate penalties by seriousness of offense; and do not abridge the protection of the Constitution regarding self incrimination.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	547 Days
*O.P.S.	\$0
CMA Staff	405 Days
Company Travel	\$40,000
CMA Travel	\$0
*O.L.S.	\$40,000

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP LEAD/SUPPORT</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Identify issues of concern or interest	PENWG/OGC	Issues identified and concerns communicated to legal group	On-going
Incorporate legal concerns into CMA comments/testimony on permitting and non-attainment	PENWG/OGC	Written CMA comments/testimony or input	By end of comment period or as timely if no specified comment period
Meetings with other associations, EPA, and DOJ	PENWG/OGC	Summaries of meetings	On-going
PENWG-Permitting, Enforcement and Nonattainment Work Group OGC-CMA Office of General Counsel			
CMA RESOURCE BREAKDOWN			
	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S./O.L.S. (\$)</u>
TECHNICAL			
Environmental	105	0	0
LEGAL	300	0	40,000

GOAL #1, OBJECTIVE #10 - ENFORCEMENT ISSUES

Description of Issue

The new Clean Air Act amendments are breaking new ground in criminal enforcement and in some instances raise substantial constitutional issues. A few examples are: the imposition of penalties on a "per day" basis resulting in excessive fines and possibly prison terms for relatively minor infractions. Some of these may well contravene the protection of the 8th amendment against "cruel and unusual punishment". The requirements to keep records and report violations may also infringe on an individual's right under the 5th amendment against self-incrimination. The broad authority under the act jeopardizes plant managers and the continued operation of facilities even if there are only minor technical violations.

The primary concerns under civil penalties are excessive fines and orders to shut down operations.

Under the Clean Air Act, agencies are empowered to issue Administrative Penalties, Field Citations, and awards for information leading to penalties. The proposed scope of authority under the Clean Air Act far exceeds that granted the agency in other statutes.

Enforcement sub-issues to be followed include:

- ☐ Criminal Penalty Policy/Guidance;
- ☐ Civil Penalty Policy/Guidance;
- ☐ Administrative Penalty Policy/Guidance;
- ☐ Bounty Hunter Provisions;
- ☐ Citations;
- ☐ Calculation of Penalties;
- ☐ Sanctions;
- ☐ FIPS;
- ☐ Recordkeeping/Reporting;
- ☐ Compliance Audits; and
- ☐ Inspections.

Importance to Industry

Criminal penalties of up to \$25,000/day and/or possibility of imprisonment of one or more years per violation, for even minor technical violations, is a significant concern to managers of facilities operating in the U.S. This issue warrants high attention. There is also potential for plant shutdown as part of the enforcement provisions.

Criteria for Success

1. Enforcement provisions in federal criteria and guidance differentiate penalties for seriousness of offense.
2. Audits, inspections and other information gathering and self reporting activities required under the CAA amendments do not abridge the protection provided by the constitution related to self incrimination.

Timing

Impact immediate upon enactment of the CAA amendments. Also the specific impacts of the enforcement provisions need to be considered as other elements of the CAA amendments are implemented in the SIP revision guidance and in individual standards or regulations for source categories.

GOAL #1, OBJECTIVE #10 - Enforcement Issues (cont.)

Options

1. Do nothing.
2. Read/follow the issue but take no overt action to influence outcome of the issue.
3. Read/follow and provide assistance to another association/group to influence the outcome of the issue.
- 4.. Read/follow and take overt action on behalf of CMA to influence the outcome of the issue.

The CMA Permitting/Enforcement Work Group plans to invoke Options 3 or 4 depending on the issue and the action deemed appropriate on each issue.

Barriers and Opposition

Timing - The enforcement requirements may, upon enactment, immediately impact industry.

Resources - EPA and/or DOJ may be unwilling to work on a work product that is not required and limits their flexibility/discretion in penalties.

Attitudes - Environmental groups and the public may be unreceptive to any guidance/provisions that allow alternatives to the most stringent enforcement action to be made against a company.

Cost and Benefit

If one year of a chemical industry officer's time in prison could be avoided, the benefit would be significant, from the individual's perspective, from the company's perspective, from an industry perspective and from the CMA perspective.

Actions Selected

The Permitting/Enforcement Work Group will help the legal group formed by CMA's Office of General Counsel to handle air enforcement concerns to identify enforcement issues in the legislative language and in policy guidance and regulations issued by EPA. Work products of the legal group will be used to strengthen comments prepared on permitting and nonattainment issues.

GOAL #1, OBJECTIVE #10 - Enforcement Issues (cont.)**RESOURCE NEEDS**

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Subgroup meetings/position development/comment development.	440	20,000	82	100	0	0	0	0
Work group review issues/comments	67	10,000	13	100	-	-	-	-
Meetings with EPA, DOJ, other trade associations	40	10,000	10	50	0	0	0	0
Litigation	--	--	--	50	--	0	40,000 ⁴	--
Totals	547	\$40,000	105	300	\$0	\$0	\$40,000	\$0

Responsibility

Criteria development will be handled by CMA legal group with assistance from the Permitting, Enforcement and Nonattainment Work Group. Review of federal SIP provisions that may include enforcement aspects will be managed by the Permitting/Enforcement Group. Primary responsibility for comments to the agency on technical control standards which may also address enforcement/compliance issues would rest with the group assigned responsibility for preparing comments on that issue. The Permitting/Enforcement Work Group would be available as a reference source or consultant to other groups as requested.

Performance Measures

Performance will be measured by whether EPA considers CMA's input in development of reasonable Constitutional enforcement provisions.

GOAL #1, OBJECTIVE #11 AMBIENT OZONE STANDARDS

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #11:

Advocate for sound scientific changes, if necessary, to the ozone standard.

ESTIMATED RESOURCE REQUIREMENTS:
Company Time 70 Days
*O.P.S. \$25,000
CMA Staff 107 Days
Company Travel \$24,000
CMA Travel \$2,400
*O.L.S. 0
*(Outside Purchased Services Outside Legal Services)

ACTION	RESP. GROUP	WORK PRODUCT	TIMING	CMA RESOURCE BREAKDOWN			
				STAFF (Days)	TRAVEL (\$)	O.P.S./O.L.S. (\$)	TECHNICAL
Review and comment on proposed changes to the ozone standard	OWG	Comments	1991				Environmental Health & Safety
Participate in EPA-sponsored workshops for next review of the ozone standard	OWG	Workshop attendance notes	1991-92				39
Evaluate alternative forms of the ozone standard	OWG	Contractor report	(1) 5/92				18
Testify and submit written comments at CASAC meetings	OWG	Testimony/comments	1993-1996				50
Participate in informal meetings with EPA to discuss ozone standard issues	OWG	Meeting notes	On-going				600
				CMA RESOURCE BREAKDOWN			
				STAFF (Days)	TRAVEL (\$)	O.P.S./O.L.S. (\$)	TECHNICAL
							Environmental Health & Safety
							39
							18
							50
							600
							25,000
							0
							0

VVV 000004986

GOAL #1, OBJECTIVE #11 - AMBIENT OZONE STANDARDS

Description of Issue

Continued research on ozone health and ecological effects may indicate the need to change the ozone standards to now reflect health/ecological information such as a possible lower 1-hr standard of 0.10 ppm and a possible 8 hours or longer standard.

Importance to Industry

A change of the ozone standard (either a lower standard or a different form of the standard) will certainly add many more areas into a nonattainment designation.

Criteria for Success

Any changes to the ozone standard will have a sound scientific basis including, where appropriate, a consideration of costs and true exposure.

Timing

The ozone standard is expected to be reaffirmed during 1991.

No change in existing form is expected, but a range may be proposed for discussion purposes.

Work on a different form of the ozone standard is expected to continue and to be included in a new ozone standard assessment beginning in late 1991 continuing until 1994.

Options

1. Do nothing.
2. Reactive, become involved where appropriate.
3. Proactive involvement: requires greater commitment from members and staff.

Barriers and Opposition

1. EPA does not accept our input.
2. Lack of ozone experts within CMA member companies to serve on work groups.

Cost and Benefit

A change to the ozone standard (either a lower standard or a different form of the standard) will likely result in increased compliance costs to industry as a result of State regulations on stationary sources designed to achieve the revised standard. Successful advocacy on this issue will help limit costs to industry to the minimum level needed to attain a scientifically based standard.

GOAL #1, OBJECTIVE #11 --Ambient Ozone Standards (cont.)

Actions Selected

1. Maintain on-going dialogue with EPA regulators and ozone researchers to follow new and pending O₃ related issues.
2. Participating in EPA SAB/CASAC Meetings and presenting testimony as needed.
3. Interface with API and other trade associations as appropriate to define common issues.

RESOURCE NEEDS

Activ/ty	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Review Standard.	22	\$7,500	18	15	0	0	--	0
Workshop	9	3,000	6	5	600	0	--	0
Evaluate Alternative Standards	6	0	6	5	0	0	--	\$25,000
CASAC Participation	18	5,800	14	15	600	0	--	0
Meeting with EPA/other associations	15	7,700	13	10	600	600	--	0
Totals	70	\$24,000	57	50	\$1,800	\$600	\$0	\$25,000

Responsibility

The Ozone Work Group with the involvement and coordination of the Health & Safety Committee.

Performance Measures

1. No change in existing ozone standard in 1991 review, unless scientifically valid.
2. New ozone standard that is scientifically based and considers cost and true exposure.

VVV 000004988

GOAL #1, OBJECTIVE #12 **OZONE ATTAINMENT STRATEGY**

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #12:

Advocate for reconsideration of EPA's current ozone attainment strategy to properly account for NOx controls, contributions of area, mobile, and biogenic sources, and ozone and precursor transport and other atmospheric transformation phenomena.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	63 Days
*O.P.S.	\$30,000
CMA Staff	110 Days
Company Travel	\$21,000
CMA Travel	\$1,800
*O.S.L.	\$0

*(Outside Purchased Services
 Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Review and comment on technical studies and/or EPA guidance and regulators for SIPs	OWG	Comments	1991-1995
Evaluate NOx versus VOC controls	OWG	Contractor report	(1) 5/92
Informal meetings with EPA to discuss ozone attainment strategy issues	OWG	Meeting minutes	On-going
OWG-Ozone Work Group			
<u>CONTRACTOR</u>	<u>COSTS</u>	<u>FISCAL YEAR</u>	
(1)	\$30,000	1991/92	
<u>CMA RESOURCE BREAKDOWN</u>			
	<u>STAFF</u> (Days)	<u>TRAVEL</u> (\$)	<u>O.P.S./O.L.S.</u> (\$)
<u>TECHNICAL</u>	60	1,200	30,000
<u>LEGAL</u>	50	600	0

GOAL #1, OBJECTIVE #12 -- OZONE ATTAINMENT STRATEGY

Description of Issue and Importance to Industry

EPA currently is operating under an ozone strategy developed in 1986 which describes specific actions intended to improve efforts to reach attainment. This plan will be revised to incorporate new scientific findings and the new requirements of the Clean Air Act. The plan will probably look at emissions inventories, the contribution of NO_x to the formation or reduction of ozone and the relative contribution to air quality from all sources, e.g., motor vehicles, area sources, industrial plants, and biogenic sources. The results will determine what must be controlled and to what extent. Since most of the chemical industry is in ozone nonattainment areas, this strategy could have a large impact on industry activities.

Criteria for Success

Development of a strategy which accurately reflects:

- ☐ the relative contribution of each source of emissions to total ozone levels;
- ☐ the value of reducing NO_x; and
- ☐ the actual levels of ozone by area.

Timing

Major activities to revise or let stand the current ozone standard will probably occur in 1991. A new ozone strategy (with or without a new standard) will probably be developed over the next two to three years.

Options

1. Do nothing.
2. Review and comment on EPA strategy.
3. Review and comment on EPA strategy and evaluate NO_x versus Volatile Organic Compounds (VOC) controls.
4. Coordinate with API and other trade associations.

Barriers and Opposition

Interests of CMA may conflict with those of other trade associations, e.g., Motor Vehicle Manufacturers Association; lack of ozone experts within member companies to serve on CMA work groups; EPA refusal to alter assumptions in strategy so that it may complete the strategy by an early date.

Cost and Benefit

A shift in EPA's ozone attainment strategy emphasizing NO_x control instead of VOC control, for example, could have substantial cost impacts. If CMA's work on this issue shows that a shift in the ozone attainment strategy is scientifically invalid, the industry could save significant resources by avoiding unnecessary NO_x control requirements.

Actions Selected

Options three and four were selected.

VVV 000004990

GOAL #1, OBJECTIVE #12 - Ozone Attainment Strategy (cont.)

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Review and comment on studies/ guidance/SIP regulations	30	\$12,000	34	20	0	0	--	0
Evaluate NOx vs. VOC controls	20	\$4,000	16	15	0	0	--	\$30,000
Meetings with EPA/other associa- tions	13	\$5,000	10	15	\$1,200	600	--	0
Totals	63	\$21,000	60	50	\$1,200	\$600	0	\$30,000

Responsibility

The Ozone Work Group will have the lead but will coordinate with other work groups in the Technical department, as appropriate.

Measurement of Performance

Development of a strategy which accurately reflects:

- ☐ the relative contribution of each source of emissions to total ozone levels;
- ☐ the value of reducing NO_x; and
- ☐ the actual levels of ozone by area.

GOAL #1, OBJECTIVE #13 RESIDUAL RISK

GOAL #1

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #13:

Advocate for a residual risk determination procedure that accurately identifies real risks posed to a community.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	1,021 Days
*O.P.S.	\$726,250
CMA Staff	487 Days
Company Travel	\$121,800
CMA Travel	\$6,600
*O.L.S.	\$31,500

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Establish Risk Assessment/Management Coalition	ADSG RATG	Meetings, reports	(1) On-going
Interact with NAS Study on risk assessment	ADSG RATG EATG	Meetings, reports	(2) 1/91-12/93
Coordinate industry input to RARM Commission	ADSG RATG	Meetings, reports, legislative records	(3) 4/92-12/93
Interact with EPA risk assessment study	ADSG RATG	Meetings, reports	(4) 11/92
Meeting with EPA on three-tiered approach and reasonable model protocols	ADMWG	Meetings	1/91-95
Review HEMS Model revisions	RATG EATG ADMWG	Meetings, comments contractor report	(5) 6/91 12/92
Evaluate EPA's developing "Toxic Expected Exceedances" (TOXX) modeling approach	ADMWG	Contractor report	(6) 7/91
Review EPA risk assessment guidelines for cancer and other acute and chronic health endpoints	RATG	Comments, meetings	(7) 2/91
Assess impact of exposure assumptions on risk	EATG	Contractor reports	(8) 5/91
Interact with NAS study on human exposure to airborne toxicants	EATG	Comments	1/91
Develop alternatives to ultra conservative exposure assessment	EATG	Contractor reports	(9) 5/91
Exposure in residual risk standards	EATG	Contractor reports	(10) 1/92-12/92
Establish acceptable methods to assess dermal exposure	EATG	Position papers, workshops	(11) 12/91-12/92
Monitor developments in exposure policy	EATG	Meetings, comments	1/91-95
Monitor and interpret research on health effects of air toxicants	ETG	Contractor reports meetings	(12) 1/91-94
Facilitate or collaborate in community health research	ETG	Meetings, contractor reports	(13) 1/92-12/95
EPA Study - monitor synthesize and interpret research on the health effects of air toxics, photooxidants and acid aerosols	ETG	Contractor reports meetings	1/91-94

AHSGR -- Ad Hoc Study Group on Risk
 RATG -- Risk Assessment Task Group
 EATG -- Exposure Assessment Task Group
 ETG -- Epidemiology Task Group
 ADMWG -- Air Dispersion Modeling Work Group

GOAL #1, OBJECTIVE #13 --Residual Risk (cont.)

CONTRACTOR	COSTS	FISCAL YEAR
(1)	\$ 37,000*	FY 91/92
	\$ 37,500*	FY 92/93
	\$ 37,500*	FY 93/94
	\$ 37,500*	FY 94/95
(2)	\$ 40,000	FY 92/93
(3)	\$ 25,000	FY 92/93
(4)	\$ 20,000	FY 92/93
(5a)	\$ 40,000	FY 91/92
(5b)	\$ 40,000	FY 92/93
(6)	\$ 50,000	FY 91/92
(7)	\$ 5,000*	FY 91/92
	\$ 5,000*	FY 92/93
	\$ 5,000*	FY 93/94
(8)	\$ 26,250*	FY 90/91 (FUNDED)
(9)	\$ 12,500*	FY 90/91
	\$ 6,250*	FY 91/92
(10)	\$ 15,000	FY 92/93
(11)	\$ 25,000	FY 91/92
	\$ 50,000	FY 92/93
(12)	\$ 60,000	FY 91/92
	\$ 60,000	FY 92/93
	\$ 60,000	FY 93/94
(13)	\$ 18,750*	FY 92/93
	\$ 6,250*	FY 93/94
	\$ 6,250*	FY 94/95

<u>CMA RESOURCE BREAKDOWN</u>			
	<u>STAFF</u> <u>(Days)</u>	<u>TRAVEL</u> <u>(\$)</u>	<u>O.P.S./O.L.S.</u> <u>(\$)</u>
<u>TECHNICAL</u>			
Environmental	77	2,400	130,000
Health & Safety**	286	3,600	596,250
<u>LEGAL **</u>	124	600	31,500

*Projects will support multi-media programs. Total costs have been divided by 4 to reflect pro-rated share for Clean Air Act programs.

**Hours shown reflect pro-rated share for air programs. Actual resources will be higher.

GOAL #1, OBJECTIVE #13 - - RESIDUAL RISK

Description of Issue and Importance to Industry

The Clean Air Act Amendments requires a review and re-evaluation of federal risk assessment and management activities and the appropriate use of these practices in regulating chemicals. This review will occur in the following phases: 1) a National Academy of Sciences (NAS) will review the risk assessment methodology used by EPA to determine the carcinogenic risk associated with exposure to hazardous air pollutants; 2) A Risk Assessment and Risk Management (RARM) Commission will be formed to address policy implications and appropriate uses of risk assessment and risk management in regulatory programs under various Federal laws and will prepare legislative recommendations to Congress; 3) an EPA study (in consultation with the Surgeon General) on appropriate methods for calculation residual risk and the public health significance of the calculated risk and technology and commercially available methods and costs of reducing such risks. The study may include legislative recommendations; and 4) If Congress fails to act on legislative recommendations within 8 years, a residual risk standard of 1×10^{-6} (to the individual most exposed) would be established. This multi-stage review will result in acceptable risk approaches being established that would cover not only air toxics but also regulation of chemical under other statutes and Federal agencies. All chemical industry operations that result in exposure of communities and workers to potentially hazardous compounds may be affected.

Criteria for Success

EPA adoption of a flexible risk assessment process that incorporates all available information and includes consideration of costs, expected benefits, limits of technology, potential negative effects of regulation, and risks of alternative management options.

Timing

CAA legislation	November 1990
National Academy of Sciences study	February 1991
Risk Assessment and Management Commission	May 1992
EPA risk assessment study	November 1992
Residual risk standards	November 1996-1998
Compliance/Implementation	November 1998-2000

Options

Reactive

1. Comment only after commission and study reports and proposed regulations
2. Litigate after promulgation of residual risk standards

Proactive

1. Develop recommendations for improving the risk assessment process (position papers and legislative recommendations)
2. Reg.-Neg. participation

GOAL #1, OBJECTIVE #13 -Residual Risk (cont.)

Barriers and Opposition

Barriers to a residual risk procedure that accurately identifies real risks posed to a community may be:

- ☐ insufficient funds and/or manpower to complete projects;
- ☐ Environmental lobby groups advocating for unreasonable residual risk standards that do not distinguish between carcinogens and non-carcinogens; and
- ☐ EPA may be unwilling to alter its course based on CMA input.

Cost and Benefit

The total cost to industry of residual risk standards will be a function of how many sources exceed unacceptable residual risk levels after MACT. This, in turn, is strongly influenced by the residual risk determination methods. Successful advocacy to ensure reasonable risk assessment and modeling methods could have a significant impact on the number of affected sources as well as the stringency of the residual risk standards themselves.

Actions Selected

Proactive advocacy through development and forwarding of recommendations was selected.

GOAL #1, OBJECTIVE #13 -- Residual Risk (cont.)

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Staff (Days)	CMA Legal Staff (Days)	CMA Tech Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Risk Assessment/Management Coalition	422	4,800	58	11	--	0	12,500	150,000
NAS Study	42	9,000	25	15	--	0	5,000	40,000
RARM Commission	38	19,000	19	5	--	0	5,000	25,000
EPA Study	90	9,000	21	5	900	0	5,000	20,000
RATG								
HEMS Model	15	4,500	10	5	1,200	600	0	--
EPA risk assessment guidelines for cancer and other health endpoints	19	3,750	14	4	--	0	1,250	15,000
EATG								
Impact of Exposure Assumption on Risk							0	26,250
Phase II	12	1,350	4	1	--	0	0	--
Phase III	48	2,025	5	1	--	0	0	--
Ultra conservative Exposure Assessment	15	875	10	2	--	0	750	18,750
HEMS Model	24	2,400	8	3	600	0	0	--
Dermal Exposure	--	--	--	--	--	0	0	75,000
Exposure Policy	2	300	2	2	--	0	0	--
NAS Study	18	5,400	10	5	--	0	2,000	--
Residual Risk	50	6,900	22	5	--	0	0	15,000
EPITG								
Air Toxics health research	130	9,000	60		600	0	0	180,000
Community health research	38	3,500	18		300	0	0	31,250
ADMWG								
Support of 3-tiered approach	12	10,000	12	15	0	0		0
Evaluate HEM2 Model	23	15,000	34	25	1,200	0		80,000
Evaluate TOXX model approach	23	15,000	31	20	1,200	0		50,000
Totals	1,021	\$121,800	363	124	\$6,000	\$600	\$31,500	\$726,250

GOAL #1, OBJECTIVE #13 -- Residual Risk (cont.)

Responsibility

The Ad Hoc Study Group on Risk, RATG, and EATG has responsibility for the actions/projects as detailed above. These groups will liaison with other trade associations and EMC task and work groups as indicated.

Performance Measures

1. NAS support for alternative risk assessment procedures and using all available information to assess potential risks.
2. RARM recommendations to use risk assessment tools to set priorities across federal activities to ensure significant threats to public health are reduced; and risk management decisions (control of chemical emissions) incorporate socio-economic, cost/net health benefit, and technical feasibility.
3. If EPA and the Surgeon General demonstrate that the potential public health threat posed by the chemical industry is minimal and decreasing.
4. Federal agencies and Congress incorporate the above process into regulatory and legislative policy.

**GOAL #1, OBJECTIVE #14
AIR QUALITY MODELING GUIDELINES**

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #14

Advocate for air quality modeling guidelines that result in reasonable, resource-effective models and model application rules.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	24 Days
*O.P.S.	\$99,500
CMA Staff	90 Days
Company Travel	\$25,000
CMA Travel	0
*O.L.S.	0

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Comment on 1990 proposed revisions to <u>Guidelines</u>	ADMWG	Written and oral comments	(1) 3/91
Evaluate area and volume source models	ADMWG	Contractor report	(2) 2/91
Comment on 1993 proposed revisions to <u>Guidelines</u>	ADMWG	Written and oral comments	(3) 3/94
ADMWG-Air Dispersion Modeling Work Group			
<u>CONTRACTOR</u>	<u>COSTS</u>	<u>FISCAL YEAR</u>	
(1)	\$30,000	1990/91	
(2)	\$34,500	1990/91	
(3)	\$35,000	1993/94	
<u>CMA RESOURCE BREAKDOWN</u>			
	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S. (\$)</u>
<u>TECHNICAL</u>			
Environmental	40	0	\$99,500
<u>LEGAL</u>	50	0	0

GOAL #1, OBJECTIVE #14 - - AIR QUALITY MODELING GUIDELINES

Description of Issue and Importance to Industry

The EPA is required every three years to revise its Guideline on Air Quality Models. The Clean Air Act Amendments will require that existing chemical facilities obtain operating permits. The Guideline specifies what air quality models may be used for State Implementation Plan development and permitting, and how those models are to be applied. Most emission regulations and permit determinations are based on those models. Incorrect or unreasonably conservative models and model applications can result in unreasonable emission regulations and in unjustified permit denial.

Criteria for Success

Successful influence on the modeling Guideline would result in more accurate models and more resource efficient models, and reasonable modeling application rules.

Timing

The proposed Guideline revisions should be published during the Fourth Quarter of 1990. The final revisions should be presented at the triannual "Conference on Air Quality Modeling", probably late in the First Quarter, 1991.

Options

Reactive

1. Contract for a consultant to prepare comments with Work Group guidance, and present them at the Conference. Use of a recognized authority on modeling gives this option the advantage of higher credibility.
2. Work Group prepare comments and present them at the Conference. Coordinate other activities with API. This option has the advantage of lower out-of-pocket cost to CMA.

Proactive

Proactive advocacy on this issue is not practical because of the structure of the Guideline revision procedure and because of the personalities of the EPA personnel involved.

Barriers and Opposition

The Source-Receptor Branch of EPA's Office of Air Quality Planning and Standards, the branch responsible for the Guideline, is very conservative in their modeling approach. In addition, environmental groups may try to impose unreasonable conservatism on the Guideline.

GOAL #1, OBJECTIVE #14 -- Air Quality Modeling Guidelines (cont.)

Cost and Benefit

Modeling costs will be incurred by companies when they apply for permits under the reauthorized Clean Air Act. Successful advocacy on this issue will help ensure that modeling costs are reasonable. In addition, successful advocacy on this issue will promote the use of reasonable model application rules. By avoiding overly-conservative model applications, facilities may be able to forego expenditures for unnecessary controls.

Actions Selected

Contract a consultant to produce written and verbal comments on the proposed revisions to the Guideline.

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Evaluation of area and volume source models for possible regulatory application	4	4,000	4	6	0	--	34,500
Meetings/Development of Comments on 1990 Proposed Guidelines	10	10,000	18	22	0	--	30,000
Meetings/Development of Comments on 1993 Proposed Guidelines	10	11,000	18	22	0	--	35,000
Totals	24	\$25,000	40	50	\$0	--	\$99,500

Responsibility

This work will be the responsibility of the Air Dispersion Modeling Work Group.

Measurement of Performance

Guidelines including only reasonable model application rules, resource-efficient models, and accurate models would indicate successful advocacy.

GOAL #1, OBJECTIVE #15 ACCIDENTAL RELEASES

GOAL #1:

To enhance the advocacy role of the chemical industry to act expeditiously, responsibly and positively in influencing the development and implementation of responsible Clean Air regulations.

OBJECTIVE #15:

Advocate for the development of reasonable accidental release/process safety management regulations.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	306 Days
*O.P.S.	\$110,000
CMA Staff	468 Days
Company Travel	\$145,000
CMA Travel	\$1,800
*O.L.S.	\$70,000

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP LEAD/SUPPORT</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Establish ARWG	ARWG	Charter membership list	12/31/90
Preliminary meeting with EPA	ARWG	Minutes, reports	1/31/91
Monitor OSHA's PSM rule-making	ARWG	Updates	ongoing
Meet with EPA on release models	ADMWG/ EATG	Minutes	2/28/91
Provide input to Safety Board selection	ARWG	Letter to Administration	4/30/91
Meetings with EPA on rule-making development	ARWG	Minutes, reports	ongoing
Monitoring EPA's rulemaking development	ARWG	Updates	ongoing
OSHA/EPA list comparison/analysis	ARWG	Contractor report	(1) 4/30/91
Develop CMA positions on list	ARWG	White-paper	4/30/91
Meet with EPA to advocate positions	ARWG	Minutes, reports	5/30/91
Propose CMA Lis/Delist procedure	ARWG	Letter proposal to EPA	6/30/91
Evaluate accidental release models under consideration	ADMWG/ EATG	Contractor's report	(2) 5/91- 8/31/91
Develop CMA's response to accidental release rulemaking	ARWG	Contractor's report	(3) 8/31/91
Review EPA's proposed rulemaking on chemical list	ARWG	Identify issues of concern	10/31/91
Prepare written comments on chemical list proposal	ARWG	CMA comments	10/31/91- 12/31/91
Interface with Safety Board	ARWG	Updates	10/31/91-ongoing
Review OSHA's PSM final rule	ARWG	Reports, Legal analysis	10/31/91- 11/31/91
Provide hazard assessment and risk management plan input to EPA and Safety Board	ARWG	CMA comments	12/31/91
Prepare testimony for EPA hearings, if held	ARWG	CMA testimony	12/29/91

GOAL # 1 OBJECTIVE #15 -- Accidental Releases (cont.)

<u>ACTION</u>	<u>RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Review EPA's proposed rule-making for risk management plans, etc.	ARWG	Identify issues of concern	11/15/92
Prepare written comments on EPA proposal	ARWG	CMA comments	11/15/92-1/15/93
Review EPA final chemical list rule	ARWG	Reports, Legal analysis	11/15/92-12/15/92
Prepare testimony for EPA risk management plan proposed rule hearings, if held	ARWG	CMA testimony	2/28/93
Monitor EPA Risk Management Plan rulemaking	ARWG	Updates	ongoing
Review Risk Management Plan final rule	ARWG	Reports	11/5/93-12/15/93
Monitor and respond, if necessary, to Safety Board's recommendations to EPA and OSHA	ARWG	Updates, comments	ongoing

ARWG -- Accidental Release Work Group
 ADMG -- Air Dispersion Modeling Work Group
 EATG -- Exposure Assessment Task Group

<u>CONTRACTOR</u>	<u>COSTS</u>	<u>FISCAL YEAR</u>
(1)	\$30,000	1990/91
(2a)	\$10,000	1990/91
(2b)	\$40,000	1991/92
(3)	\$30,000	1991/92

<u>CMA RESOURCE BREAKDOWN</u>			
	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S./O.L.S. (\$)</u>
<u>TECHNICAL</u>			
Environmental	40	1,200	50,000
Safety & Plant Operations	200	0	60,000
<u>LEGAL</u>	228	600	70,000

GOAL #1, OBJECTIVE #15 - - ACCIDENTAL RELEASES

Description of Issue and Importance to Industry

Under the Accidental Release provisions of the Clean Air Act, EPA and OSHA must promulgate a number of regulations. EPA must promulgate an initial list of 100 substances which are known to cause or may reasonably be anticipated to cause death, injury or serious adverse health or environmental effects. EPA must also promulgate regulations and guidance for the prevention, detection and correction of accidental releases, including a requirement to prepare and implement risk management plans. An independent safety board will be established to investigate the causes of accidental releases which result in fatalities, serious injuries or substantial property damage. OSHA must also promulgate a chemical process safety standard. These activities will have a major impact on how the chemical industry operates, and are, therefore, of vital importance.

For each substance listed under the accidental release provisions, EPA must promulgate a threshold quantity which determines the applicability of requirements. EPA will base these threshold levels in part on the dispersibility of a chemical. Which models are used and how will play an important part in this determination. This information will also be used when the Agency decides to add or delete substances from the provisions. Thus, the design and use of these models could have enormous impact on the industry in terms of what substances get regulated, to what extent, and even whether a source can qualify for a permit to continue operations.

Criteria for Success

1. EPA and OSHA will develop reasonable accidental release process safety regulations.
2. Design and use by EPA of models that accurately reflect expected concentrations of listed pollutants due to accidental releases.

Timing

Within two years of enactment, EPA is required to promulgate a list of 100 substances subject to the provisions. At the same time, EPA is required to establish the threshold quantities. The list may be revised from time to time for the addition or deletion of substances.

Within three years of enactment, EPA is required to promulgate release prevention, detection and correction requirements. The safety board will be established within the first year after enactment, because its first report is due to EPA 18 months after enactment. The OSHA standard must be promulgated within one year of enactment.

Options

ARWG

1. Do nothing.
2. Monitor activities, but do nothing.
3. Monitor activities and employ reactive advocacy methods.
4. Employ proactive advocacy methods to influence outcomes.

GOAL #1, OBJECTIVE #15 -- Accidental Releases (cont.)

ADMWG/EATG

1. Do nothing.
2. Evaluate current models as they become available.
3. Design new models.

Barriers and Opposition

EPA is unwilling to work with CMA because of:

- ☐ short time frame for rulemakings;
- ☐ lack of resources at CMA; and
- ☐ EPA acts independently of CMA input.

Possible difficulty in gaining access to all information necessary to evaluate current models. EPA refuses to consider revisions due to vested interest in current models or the agency does not have adequate time to design or review a new model and still meet statutory requirements for developing threshold levels.

Cost and Benefit

The costs of these regulations will be substantial because member companies will have to prepare risk management plans for all chemicals stored at their facilities above the threshold quantities.

The specific cost/benefit of these activities cannot be determined at this time but the return on the hours CMA projects to invest in this issue should be positive.

Actions Selected

Option 4 was chosen, where possible.

GOAL #1, OBJECTIVE #15 -- Accidental Releases (cont.)

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Meet with EPA on release models	5	4,000	8	8	1,200	600	--	
Evaluate Accidental Release Models	15	11,000	32	20	1,200	0	--	50,000
EPA chemical list activities	143	65,000	100	100	0	0	20,000	30,000
EPA Risk Management Plan Rulemaking	143	65,000	100	100	0	0	50,000	30,000
Totals	306	\$145,000	240	228	\$1,200	\$600	\$70,000	\$110,00

Responsibility

The Accidental Release Work Group will have the lead but will need to coordinate with other work groups/task groups such as the Air Dispersion Modeling WorkGroup.

Measurement of Performance

1. Use of models based on reasonable criteria.
2. Reasonable, cost-effective risk management plan requirements.

GOAL #2, OBJECTIVE #1 MEMBER COMPANY COMMUNICATION

GOAL #2:

To communicate the results of the advocacy efforts to member companies.

OBJECTIVE #1:

Acquaint member companies and other CMA Departments with results of Advocacy effort so that companies may be prepared for anticipated regulations and other Departments can be prepared for legislative activities.

ESTIMATED RESOURCE REQUIREMENTS

Company Time	405 Days
*O.P.S	\$73,500
CMA Staff Time	1,312 Days
Company Travel	\$160,000
CMA Travel	\$31,000
*O.L.S.	--

*Outside Purchase Services
Outside Legal Services)

<u>ACTION</u>	<u>LEAD/SUPPORT RESP. GROUP</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Prepare and distribute results in newsletter	AITG/H&S	Air Issues Newsletter	On-going
Conduct workshop(s) on specific regulations	AITG/H&S	Workshop(s) and its proceedings	1 per year over 3 years
Participate in co-sponsored workshops with EPA and/or other outside organizations.	ARWG/H&S	Brochures, workshop materials	(1) On-going
Executive letter from R. Roland to senior executives	AITG/H&S	Letter	On-going
CMA Environmental Alerts, publications	AITG	Alert	On-going
Presentations at EMC	AITG/H&S	EMC meeting minutes	On-going
Present information to CMA Board	AITG/H&S	Text of President	On-going
Present information at CMA updates	AITG/H&S	Update proceedings	On-going
Invite other task group and CMA committee members to AITG meeting.	AITG/H&S	Minutes of meetings	On-going
Create brochure(s), video tapes, and workshop materials, as appropriate to inform member companies	AITG/H&S/CC	Video tapes & brochures	(2) Over 5 years, most (3) tape & brochures (4) completed in first 3 years
Inform CIC's	SAC	Letters	On-going
Identify need for and prepare technical corrections to CAA	AITG/H&S ALITG/GR	Technical corrections	On-going
Provide support to future air legislative activities	AITG/ALITG/GR/H&S	Position papers	On-going

AITG -- Air Issues Task Group
 ALITG -- Air Legislative Issues Task Group
 CC -- Communication Committee
 GR -- Government Relations
 SAC -- State Affairs Committee
 H&S -- Health and Safety

GOAL #2, OBJECTIVE #1 - Member Company Communication (cont.)

<u>CONTRACTOR</u>	<u>COST</u>	<u>FISCAL YEAR</u>
(1)	\$ 8,500	1990/91
(2)	\$20,000	1991/92
(3)	\$20,000	1991/92
(4)	\$25,000	1993/94

<u>CMA RESOURCE BREAKDOWN</u>			
	<u>STAFF (Days)</u>	<u>TRAVEL (\$)</u>	<u>O.P.S./O.L.S. (\$)</u>
<u>TECHNICAL</u>			
Environmental	260	12,000	20,000
Health and Safety	190	15,000	53,000
<u>LEGAL</u>	722	4,000	0
<u>GOVERNMENT RELATIONS</u>	200	0	0

GOAL #2, OBJECTIVE #1- -MEMBER COMPANY COMMUNICATION

Description of Issue and Importance to Industry

The importance of informing member companies of the results of the advocacy efforts so that they may be better prepared for forthcoming regulation is self-explanatory.

Criteria for Success

Informing member companies of the results of the advocacy efforts such that they are prepared for upcoming regulation.

Timing

Outreach activities over a period of five years are anticipated. A majority of those activities are anticipated to occur during the first three years.

Options

1. Proactive.
2. Reactive.

Barriers and Opposition

The main barrier that is seen is possible shortage of resources in order to appropriately inform member companies.

Cost and Benefit

The costs are anticipated to be somewhere in the area of \$1,000,000 spread over five years with the majority of funds being spent in the first three years. The benefit will be a reduction in possible fines and penalties as a result of non-compliance.

Actions Selected

Actions are proactive rather than reactive in preparing texts in the form of brochures and workshops, videotapes, and any and all appropriate measures to ensure information reaches member companies.

Resources

Resources to fulfill this Goal and Objective are primarily the Air Issues Task Group with support from Health and Safety groups as appropriate; however, input is also from the Communications Committee and possible the State Affairs Committee.

RESOURCE NEEDS

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Govt. Relations (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Newsletters, Environmental Alerts, and other mailings	0	0	100	225	0	0	0	0	0
CMA workshops and updates	75	50,000	75	75	0	21,000	4,000	0	0
EMC and Board briefings	10	5,000	20	42	0		0	0	0
Brochures, videotapes, and workshop materials	260	74,000	135	250	0		0	0	65,000
Cosponsored workshops with outside organizations	20	7,000	10	80	0	6,000	0	0	8,500
Support on legislative activities	40	24,000	50	60	200			0	
Totals	405	\$160,000	390	722	200	\$27,000	\$4,000	\$0	\$73,500

Responsibility

Carrying out this Goal and Objective is the responsibility of the Air Issues Task Group.

Performance Measures

Feedback from member companies that have been adequately informed to enable compliance with regulations.

GOAL #3, OBJECTIVE #1 AIR POLLUTION RESEARCH

GOAL #3:

Monitor and positively influence air pollution research and advocate for the use of such research in crafting sound and scientifically based legislation and regulations.

OBJECTIVE #1:

Develop a program to monitor current air pollution research and contribute to additional research that may influence the development of more scientifically based legislation and regulations.

ESTIMATED RESOURCE REQUIREMENTS:

Company Time	102 Days
Company Travel	\$48,000
CMA Staff Time	\$15
CMA Staff Travel	\$4,800
O.P.S.*	\$50,000
O.L.S.	0

*(Outside Purchased Services
Outside Legal Services)

<u>ACTION</u>	<u>RESP. GROUP LEAD/SUPPORT</u>	<u>WORK PRODUCT</u>	<u>TIMING</u>
Identify and review current air pollution research activities of Govt., Industry, academia, etc.	AITG**	Listing	On-going
Prioritize activities according to potential impact on CAA Advocacy	AITG**	Listing	Within one month of completion of review activity
Identify key contacts of high priority projects	AITG**	Listing	On-going
Arrange meetings with key contacts	AITG**	Meeting scheduled and agenda prepared	On-going
Meet with key contacts	AITG**	Meeting minutes	Within 14 days of meeting
Summarize current research activities and identify additional research opportunities	AITG**	Report	On-going
Circulate report to appropriate contacts (Govt., industry, academia)	AITG**	Coordinate action with outside groups	Within 7 days of CMA approval of report
Revise and submit report for formal CMA approval along with necessary OPS requests or new research	AITG**	Report	Within 30 days of receipt of comments
Execute contract*	AITG**	Contract	On-going
Monitor CMA research activities	AITG**	Periodic reports to AITG	On-going
Draft alternative regulatory/legislative frameworks for controlling air pollution based on results of research	AITG**	Report	On-going
Organize forums for discussion of new frameworks	AITG**	Meetings	On-going
Draft CAA amendments based on framework	AITG**	Legislative language	On-going

** AITG -- Air Issues Task Group in oversight role; day-to-day managerial tasks and contract management are the responsibilities of the relevant work group(s)

GOAL #3, OBJECTIVE #1 -- Air Pollution Research (cont.)

<u>CONTRACTOR</u>	<u>COSTS</u>	<u>FISCAL YEAR</u>
(1)	\$50,000	1992-1993

<u>CMA RESOURCE BREAKDOWN</u>			
<u>TECHNICAL</u>	<u>STAFF</u> <u>(Days)</u>	<u>TRAVEL</u> <u>(\$)</u>	<u>O.P.S./O.L.S.</u> <u>(\$)</u>
Environmental	135	1,800	50,000
CHEMSTAR	20	800	
PCTG	50	800	
PETG	20	600	
Health and Safety	20	600	
<u>LEGAL</u>	70	600	

PCTG -- Process Control Task Group
PETG -- Process Emission Task Group

GOAL #3, OBJECTIVE #1- - AIR POLLUTION RESEARCH

Description of Issue and Importance to Industry

Many of the requirements in the Clean Air Act are based on outdated scientific evidence. In addition, EPA generally uses the most conservative assumptions when applying this information to the development of regulations and guidance. As a result, industry is often subject to controls far beyond what reasonable science dictates is necessary.

For example, an area within the country is considered to be in nonattainment for ozone if the fourth highest monitor reading taken within the past three years shows an ozone concentration of greater than 0.12 ppm for more than one hour. Los Angeles exceeded this level 145 days during the 1986 to 1988 period. Thus, based on this, Los Angeles is subject to the most stringent ozone requirements in the country. Another measure of ozone not used by EPA is how often an area is below the standard for all monitoring hours. Using this approach, Los Angeles meets the ozone standard 97.3% of the time. In fact, using this measurement, all nonattainment areas are below the standard 99.4% of the time. Since the health effects from exposure to ozone are short term and reversible, this raises serious questions about current requirements in nonattainment areas. Furthermore, in some areas natural sources may be causing the ozone nonattainment. We need to understand the natural cleansing mechanism.

Criteria for Success

Passage of amendments to the current Clean Air Act which include sound scientific approaches for the control of air pollutants, and recognize the contribution of natural contributions.

Timing

The Clean Air Act is expected to be reauthorized in 5 years. Based on this, the schedule of activities for influencing this reauthorization is as follows:

- 1991— Identification and review of current research activities.
- 1992/93— Development of chemical industry research programs to supplement existing research.
- 1994— Following completion of research, development of alternative regulatory frameworks based on research findings and exchange of ideas with other groups in industry and government.
- 1995— Development of amendments to the Clean Air Act encompassing new regulatory approaches.

Options

1. Do nothing.
2. Monitor current research programs.
3. Monitor current research programs and fund additional research as necessary.

Barriers and Opposition

There are two primary barriers to achieving success: (1) inadequate funding to complete the research, and (2) Congressional or EPA disregard of research findings.

Cost and Benefit

Research, monitoring results, and developing new regulatory approaches will be costly; however the benefit will be more sound regulatory requirements.

GOAL # 3, OBJECTIVE #1 -- Air Pollution Research (cont.)**RESOURCE NEEDS**

Activity	Member Company Time (Days)	Member Company Travel (\$)	CMA Tech. Time (Days)	CMA Legal Time (Days)	CMA Tech. Travel (\$)	CMA Legal Travel (\$)	Outside Legal Services (\$)	Outside Purchased Services (\$)
Identify & Review Research	38	12,000	50	16	0	--	--	0
Meetings with EPA and Key Researchers	12	12,000	16	10	3,000	600	--	0
Development of Report	6	4,800	28	10	0	--	--	0
Monitor Contract	4	4,800	24	4	0	--	--	50,000
Draft Frameworks	10	4,800	32	10	0	--	--	0
Forums	30	4,800	62	10	1,200	--	--	0
Draft Amendments	2	4,800	33	10	0	--	--	0
Totals	102	\$48,000	245	70	\$4,200	\$600	--	\$50,000

Actions Selected

Option "3" was selected.

Responsibility

The Air Issues Task Group will have general managerial and oversight responsibilities for this project. Actual contract management will rest with the relevant AITG work groups. Other groups with responsibility are identified in Appendix IV.

Performance Measures

Enactment of legislation which incorporates new regulatory approaches based on sound science.

PART III
APPENDICES

APPENDIX I

ANTICIPATED TRADE ASSOCIATIONS' ACTIVITIES

AIR ISSUES

Air Toxics

Risk Assessment

~~On-site~~ non-attainment

Permitting

Enforcement

Vehicle emission reduction

Area sources

Accidental releases

Alternative fuels

<u>CMA</u>	<u>SOCMA</u>	<u>API</u>	<u>MVMA</u>	<u>NAM</u>	<u>AISI</u>	<u>EPRI</u>	<u>NPCA</u>
x	x	x	x	x	x	x	x
x	x	x	x		x	x	
x	x		x	x	x	x	x
x	x			x		x	
x							
		x	x				
		x		x			x
x	x	x	x		x		
		x	x				

SOCMA - Synthetic and Organic Manufacturers Association
 API - American Petroleum Institute
 MVMA - Motor Vehicle Manufacturers Association
 NAM - National Association of Manufacturers
 NPCA - National Paint and Coatings Association
 AISI - American Iron and Steel Institute
 EPRI - Electric Power Research Institute

Exhibit 2.3-3 (continued)
 AIR RELEASES OF TOXIC CHEMICALS LEADING TO TWO THOUSAND OR MORE EVACUEES
 (1982 - 1986)

DATE	SUBSTANCES RELEASED			END EFFECTS				NUMBER	NUMBER	NUMBER
	SUBSTANCE 1	SUBSTANCE 2	SUBSTANCE 3	1ST	2ND	3RD	4TH	OF INJURIES	OF DEATHS	OF EVACUEES
12-May-83	PLASTIC			VR	FI	UU	UU	0	0	6,400
04-Apr-83	NITRIC ACID			SP	VR	FI	EX	40	0	5,000
26-Jan-83	SULFURIC ACID			SP	VR	UU	UU	10	0	3,000
05-Nov-83	AMMONIA (ANHYDROUS)			FI	UU	UU	UU	1	0	2,000
12-Dec-82	ACROLEIN			EX	FI	VR	UU	1	0	20,000
02-Jun-82	NITRIC ACID			EX	FI	VR	SP	64	2	5,000
06-May-82	MALEIC ACID			EX	FI	VR	UU	10	0	3,500
28-Sep-82	VINYL CHLORIDE	TETRAETHYL LEAD	HYDROCHLORIC ACID	FI	EX	SP	VR	5	0	3,000
25-Feb-82	PHOSPHORUS TRICHLORIDE			SP	VR	UU	UU	2	0	3,000
30-Nov-82	STYRENE			EX	FI	VR	UU	11	0	3,000
14-Sep-82	CHLORINE	HYDROGEN PEROXIDE	SODIUM HYDROXIDE	EX	FI	UU	UU	1	0	2,500
21-Apr-82	CHLORINE			FI	VR	UU	UU	0	0	2,100
10-Apr-82	CHLORINE			VR	UU	UU	UU	12	0	2,100
13-Sep-82	SODIUM HYDROSULFIDE	PARAQUAT		FI	UU	UU	UU	29	0	2,000
FIVE YEAR TOTAL								1,519	5	190,575

End Effect Codes: SP - spill; VR - vapor release; FI - fire; EX - explosion; UU - unknown

ESTIMATE OF TOTAL COSTS FOR FY 2000

IN DOLLARS	\$1,152,840	\$328,510	\$171,000	\$101,850	\$110,000	\$338,400	\$48,833	\$184,000	\$144,000	80	38,000	\$4,000	\$4,800	0	0	0	TOTAL FOR FY 88/89	\$2,804,933
TIMED FIVE YEARS	\$8,783,200	\$1,842,950	\$856,000	\$508,250	\$550,000	\$1,882,000	\$234,887	\$870,000	\$720,000	80	\$45,000	\$20,000	\$23,000	88	80	80	FY 88/89 TIMES FIVE YEARS	\$13,024,887
NUMBERS IN PLAN	\$8,582,400	\$1,856,800	\$2,088,500	708,750	\$1,021,500	\$2,882,800	305800	\$1,888,400	\$80,000	\$40,000	\$56,800	21000	\$40,800	80	\$3,000	\$08,800	TOTAL FOR PLAN	\$17,478,550
% INCREASE REQUESTED	14%	19%	144%	50%	88%	75%	38%	74%	-88%	-	28%	5%	77%	-	-	(14)	PERCENT INCREASE REQUESTED	34%

Notes on Estimation

- (1) Number of Meetings—Based on CMA Environmental Annual Report
- (2) # of Representatives—Based on CMA Meeting Rosters
- (3) Company Time Days—Total of "Number of Meetings" X "Number of Reps" X
70% Participation X 2.0 Days per meeting (Meeting time,
travel time, preparation time) X \$800/day
- (4) Company Time Days—Includes 430 days from Government Relations
- (5) Company Travel—Total of "Number of Meetings" X "Number of Representatives" X
70% Participation X \$600/Trip
- (6) O.P.S. and O.I.S. (Env & Legal)—Based on FY 88/89 Budget Expenditures
- (7) O.P.S. Health and Safety—Based on Health and Safety Support for
Air Program, which equals Health & Safety Budget Figures divided by 4.0
- (8) Time Environmental—Based on 240 days/year X (.5) staff + .5 CMA management
- (9) Time Health and Safety—Based on 240 days/year X (.4) staff + .1 CMA management
- (10) Time Legal—Based on 240 days/year X (1) staff + .2 CMA Management
- (11) Travel Environmental & Legal—Based on FY 88/89 Budget Expenditures
- (12) Travel Health & Safety—Based on Health & Safety Support for
Air Program, which equals Health & Safety Travel Budget Figures divided by 4.0
- (13) Time Government Relations—Based on 240 days/year X (1.1) + 4 CMA management
- (14) Miscellaneous Time and Travel—From Goal 1/Objective 1 in Plan; 90 staff days X \$400 + \$600 for travel.

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APPENDIX B
SUMMARY

[illegible]

(1)	0 P.S. Technical—Equal to 0 P.S. Environmental plus 0 P.S. Health and Safety
(2)	Time (Technical—Equal to Environmental Staff Time plus Health and Safety Staff Time)
(3)	CMH Environmental and General Contract Staff Time is Adjusted by +25%.
(4)	Travel Technical—Equal to Environmental Staff Travel plus Health and Safety Staff Travel

Abstract

BREAKDOWN OF PLAY TOTALS:

O.P. \$.	O.L.B.	COMPANY TIME	COMPANY TRAVEL	CMAA STAFF TIME	CMAA STAFF TRAVEL	TOTAL
10%	1,087,500	2,790,250	1,855,000	1,500,000	122,000	\$17,678,550
10%	0%	30%	11%	20%	1%	100%

85

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APPENDIX IV

EXPECTED EXPENDITURES

OUTSIDE PURCHASED SERVICES (O.P.S.)
OUTSIDE LEGAL SERVICES (O.L.S.)

(IN DOLLARS)

GOAL 1

Objectives	O.P.S.(1) 90/91	O.L.S.(1) 90/91	O.P.S. 91/92	O.L.S. 91/92	O.P.S. 92/93	O.L.S. 92/93	O.P.S. 93/94	O.L.S. 93/94	O.P.S. 94/95	O.L.S. 94/95	O.P.S. TOTAL	O.L.S. TOTAL	TOTAL OUTSIDE SERVICES
1	10,000	10,000	30,000	150,000	0	30,000	0	0	0	0	80,000	210,000	270,000
2	40,000	0	30,000	0	0	0	0	0	0	0	70,000	0	70,000
3	75,000	0	353,000	20,000	270,000	40,000	204,000	20,000	120,000	50,000	1,040,000	130,000	1,170,000
4	74,000	10,000	225,000	150,000	45,000	30,000	0	0	0	0	344,000	210,000	554,000
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	9,000	0	70,000	0	20,000	0	20,000	0	0	0	125,000	0	125,000
7	0	20,000	0	20,000	0	40,000	0	0	0	30,000	0	110,000	110,000
8	0	10,000	0	20,000	0	20,000	0	40,000	0	30,000	0	120,000	120,000
9	25,000	10,000	0	40,000	0	20,000	0	0	0	30,000	35,000	100,000	135,000
10	0	10,000	0	0	0	0	0	30,000	0	0	0	40,000	40,000
11	0	0	25,000	0	0	0	0	0	0	0	25,000	0	25,000
12	0	0	30,000	0	0	0	0	0	0	0	30,000	0	30,000
13	30,750	0	223,750	1,800	311,250	18,800	108,750	5,800	43,750	4,000	728,250	31,300	757,750
14	84,900	0	0	0	0	0	35,000	0	0	0	80,900	0	80,900
15	40,000	0	70,000	20,000	0	20,000	0	0	0	30,000	110,000	70,000	180,000

GOAL 2

1	8,800	0	40,000	0	0	0	25,000	0	0	0	73,300	0	73,300
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GOAL 3

1	0	0	0	0	30,000	0	0	0	0	0	30,000	0	30,000
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SUBTOTALS	402,750	70,000	1,122,750	423,800	705,250	258,800	382,750	95,800	172,750	174,000	2,786,250	1,021,300	3,817,750
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TOTAL OUTSIDE SERVICES BY FISCAL YEAR		472,750		1,546,250		963,750		488,250		346,750			
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OUTSIDE SERVICES BY DIV/DEPT	TOTAL FY 90/91	FY 90/91 COMMITTED	FY 90/91 ADDITIONAL FUNDS NECESSARY FOR PLAN	FY 91/92	FY 92/93	FY 93/94	FY 94/95	TOTAL
ENV/TECHNICAL	325,500	130,763	184,737	898,000	434,000	258,000	129,000	2,096,500
HEALTH/TECHNICAL	30,750	30,750*	0	133,750	271,250	108,750	43,750	598,250
SAFETY & PLANT OPERATIONS/TE	30,500	0	30,500	30,500	0	25,000	0	113,000
STATE AFFAIRS	0	0	0	0	0	0	0	0
GOVT. RELATIONS	0	0	0	0	0	0	0	0
GENERAL COUNSEL	70,000	70,000*	0	423,800	258,800	95,500	174,000	1,021,900
	472,750	236,513	233,237	1,546,250	963,750	488,250	346,750	TOTAL 3,817,750

* (Does not include \$48,000 for Legal Department legislative support or \$105,500 for prior Health support for Air)

ADJUSTMENT TO INCLUDE

\$48,000 & \$105,500 FOR ALL FY 90/91 ACTIVITIES	828,250
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OUTSIDE SERVICES BY DEPARTMENT

	FY 90/91	FY 91/92	FY 92/93	FY 93/94	FY 94/95	TOTAL
TECHNICAL	402,750	1,122,750	705,250	382,750	172,750	2,786,250
STATE AFFAIRS	0	0	0	0	0	0
GOVT. RELATIONS	0	0	0	0	0	0
LEGAL	70,000	423,800	258,800	95,500	174,000	1,021,900
	472,750	1,546,250	963,750	488,250	346,750	3,817,750

APPENDIX

[illegible]

87

12,604,931
 1712,500,000
 0.132

APPENDIX VI
CMA
STRATEGIC PLAN
ROLES OF CMA COMMITTEES/TASK & WORK GROUPS

ENVIRONMENTAL MANAGEMENT COMMITTEE

The Environmental Management Committee is the oversight committee to the Air Issues Task Group. They will be kept informed and act as a resource supplying group should the Air Issues Task Group need assistance.

AIR ISSUES TASK GROUP:

Mission: It is the mission of the Air Issues Task Group to monitor and provide technical support for all phases of the air standards and regulatory process including data development, negotiation, notice and comment, rulemaking, and litigation. The Task Group shall guide and coordinate comments and technical support for membership and in response to regulatory action.

Work Groups

1. *Air Dispersion Modeling Work Group.*

Mission: Assist member companies of the chemical industry by addressing air dispersion modeling concerns. Assuring the proper use of the dispersion models in the regulatory process.

2. *Air Permitting, Enforcement and Nonattainment Work Group.*

Mission: Initiate and communicate a proactive stance on EPA activities regarding permitting, enforcement, and attainment issues to assure that CMA's positions are represented.

3. *Air Toxics Work Group.*

Mission: To positively impact, through participation in the development of, regulatory activities involving air toxics. Initial emphasis will be on new regulations dealing with chemical lists, source category selection and MACT standards to be issued by EPA under Title III of the reauthorized Clean Air Act.

4. *Fugitive Emissions Work Group.*

Mission: Monitor and provide technical support and guidance related to emissions from leaking equipment (called fugitive emissions) for all phases of the regulatory development process including data development and review, negotiation, notice and comment on rulemaking, and litigation. Prepare comments and technical support and guidance to meet membership needs in anticipation of a response to regulatory actions.

5. *New Source Performance Standards Ad Hoc Work Group.*

Mission: This work group continues to form and operate when needed to respond to EPA's regulatory efforts about new source performance standards (NSPS) for source categories.

6. *Ozone Work Group.*

Mission: Represent the interest of CMA member companies while assisting the Federal government in developing a scientifically sound basis for promulgating appropriate National Ambient Air Quality Standards and regulations for Ozone.

7. *Secondary Emissions Work Group.*

Mission: Prepare comments and technical support/guidance for membership needs and respond to regulatory action in the area of secondary emissions. Secondary Emissions are defined as: emissions which occur as a result of a construction or operation of a major stationary source but do not come from the major stationary source itself.

HEALTH AND SAFETY COMMITTEE

Ad Hoc Study Group on Risk

The Ad Hoc Study Group on Risk will oversee a CMA initiative to address the broad spectrum of technical, social, economic and political factors of imposed risk. Members of the the group will represent several CMA committees and many disciplines. The group will develop a strategy to gain consensus among government, academia, industry and other groups on definitions, protocols, applications and limits of risk assessment. Additionally, the group will develop a CMA workplan and an interactive strategy with other organizations and associations to address risk assessment and management issues.

Epidemiology Task Group

Develop advocacy principles, positions, and plans for CMA with respect to important issues related to the investigation of the relationship between human health effects and chemical exposure through occupational and environmental epidemiology disciplines.

Accidental Release Work Group

To lead CMA's regulatory advocacy efforts to OSHA and EPA in the development of reasonable process safety management and accidental release regulations and guidelines.

Risk Assessment Task Group

The Risk Assessment Task Group (RATG) will develop and advocate CMA positions on risk assessment issues. The overall goal is to improve the technical basis of risk assessment through central regulatory agencies and research organizations. The RATG will also conduct seminars for staff and member company representatives on risk assessment issues.

Exposure Assessment Task Group

Develop, coordinate, and advocate CMA positions and technical responses on exposure assessment issues of importance to the chemical industry. The EATG will advocate the use of appropriate exposure assumptions and methods in the legislative/regulatory application of exposure assessment.

Existing Chemicals Testing Task Group

The Existing Chemicals Testing Task Group is responsible for CMA's advocacy and policy development regarding methods and programs to evaluate potential human health and environmental effects of existing industrial chemicals.

GOVERNMENT RELATIONS COMMITTEE

To review CMA comments relative to regulatory requirements, and provide information obtained through Hill contact that might be useful to the CMA assessment process.

STATE AFFAIRS COMMITTEE

The State Affairs Committee manages state issues by working through member companies, chemical councils and their Federation, state business associations, organizations representing state and local elected officials, and appropriate coalitions; and implement direct regulatory advocacy on a selected basis in states with no Chemical Industry Councils (CIC) structure on issues of national significance to the chemical industry.

APPENDIX VIIA

COORDINATION OF STRATEGIC ACTION ITEMS FOR GOAL #1 An 'X' Identifies The Work Group(s) Anticipating Action In Response To Plan Objectives

WORK GROUPS*

ISSUE	AT	PEN	FE	SE	ADM	O3/NAAQs	NSPS CONTROL TECH.	OTHER CMA COMMITTEE, TG/WG (NAME) HSC
Chemical Listing/Delisting	x							
MACT Source Categories	x							HSC
MACT Standards								
- Process Vents	x						x	
- Storage Tanks	x						x	
- Transfer Operations	x						x	
- Equipment Leaks	x		x					
- Wastewater	x			x				
Revisions of equipment leak emission factors/identifica- tion of low emission perform- ance technology			x					
Improved emission estima- tion techniques for secondary emissions				x				
NSPS							x	
CTGs							x	
Permitting Issues		x						
Nonattainment Issues		x						
Enforcement Issues		x				x		
Ambient Ozone Standards						x		
Ozone Attainment Strategy						x		
Residual Risk Modeling	x				x			HSC
Air Quality Modeling Guide- lines					x			
Accidental release Modeling					x			
Residual Risk Standards	x							HSC
Accidental Release Require- ments					x			HSC

*Assumes Office of General Counsel support on each issue.

AT - Air Toxics Work group
 PEN - Permitting, Enforcement and Nonattainment Work Group
 FE - Fugitive Emissions Work Group
 SE - Secondary Emissions Work Group
 ADM - Air Dispersion Modeling Work Group
 O3/NAAQs - Ozone and National Ambient Air Quality Standards
 NSPS - New Source Performance Standards
 HSC - Health and Safety Committee
 TG - Task Group
 WG - Work Group
 HEWG -
 RMWG -

APPENDIX VIII

COORDINATION OF STRATEGIC ACTION ITEMS FOR GOALS #2 & 3

An 'X' Identifies The Work Group(s) Anticipating
Action In Response To Plan Objectives

WORK GROUP

ACTION	AT	PEN	FE	SEC. EMISSIONS	ADM	03/NAAQS	Other CMA Committees, TG WG (Name)
Identification and Review of Research	X		X	X	X	X	CHEMSTAR PCTG PETG H&S
Meet with key* Contacts							
Develop Report on Research*							
Monitor Contract*							
Draft Alternative Framework*							
Draft CAA Amendments							ALITG OGC DistrGR
Distribute Newsletters, Conduct Workshops, Create Brochures	X	X	X	X	X	X	Communications, GR, ALITG

*Responsibilities depend upon what type(s) of research is selected.

PCTG - Process Control Task Group/Eng. & Operations Committee
 PETG - Pressure Equipment Task Group
 H&S - Health and Safety Committee
 ACITG - Air Legislative Issues Task Group
 GR - Government Relations
 AT - Air Toxics Work Group
 PEN - Permitting, Enforcement and Nonattainment Work Group
 FE - Fugitive Emissions Work Group
 ADM - Air Dispersion Modeling Work Group
 03/NAAQS - Ozone and National Ambient Air Quality Standards
 TG - Task Group
 WG - Work Group
 CHEMSTAR - Chemical Self-funded Technical Advocacy & Research

APPENDIX VIII

AIR ISSUES TASK GROUP

SCHEDULE OF MEETINGS FY 1990/91 THROUGH FY 1994/95

January		x			
February	x	x	x	x	x
March		x	x	x	x
April	x	x	x	x	x
May					
June	x	x	x	x	
July	x	x	x	x	
August	x	x	x	x	
September	x	x	x	x	
October	x	x	x	x	
November	x	x	x	x	
December	x	x	x	x	
	1991	1992	1993	1994	1995

APPENDIX IX

GLOSSARY OF TERMS

Actions: Specific defined activity which is measurable, achievable and designed to accomplish an aspect of a stated objective over a specific time period.

ADMWG: Air Dispersion Modeling Work Group.

AIHC: American Industrial Health Council.

API: American Petroleum Institute.

BDT: Best Demonstrated Technology.

CASAC: Clean Air Scientific Advisory Committee.

CFC's: Chlorofluorocarbons.

CHEMSTAR: Chemical Self-Funded Technical Advocacy and Research.

CIC: Chemical Industry Council.

CMA Tech./Legal Time: CMA staff devoted to the Strategic Plan at \$50 per hour. This does not include costs for travel.

Company Time: Sweat equity of company participants in CMA Committees, Task Groups and Work Groups. This has been estimated at \$100 per hour over an eight hour day and does not include travel costs with it.

CQ: Carbon Monoxide.

CTG: Control Techniques Guideline

DOJ: Department of Justice

EDE: Environmental Defense Fund

EPA: Environmental Protection Agency.

FIP: Federal Implemented Plan.

GAO: Government Accounting Office.

Goal: The identification in broad terminology of a level of targeted accomplishments to be achieved by a group performing over some time period.

HAP: Hazardous Air Pollutants.

"Ideal" vision and process: Terms used in the Ad-Hoc Regulatory Advocacy CMA Board Advocacy CMA Board Advisory Committee to identify an approach designed to improve regulatory advocacy for the chemical industry.

MACT: Maximum Available Control Technology.

MEI: Maximum Exposed Individual.

NA: Nonattainment-Geographical areas of the U.S. that have not achieved an ambient concentration of a specifically identified criteria pollutants.

NAAQS: National Ambient Air Quality Standards.

NAPCTAC: National Air Pollution Control Techniques Advisory Committee.

NAS: National Academy of Sciences.

NESHAP: National Emissions Standard for Hazardous Air Pollutants.

NOx: Oxides of Nitrogen includes Nitrogen Oxide and Nitrogen Dioxide.

NRDC: National Resources Defense Council .

NSPS: New Source Performance Standards.

O₃: Ozone.

Objectives: Specific measurable and achievable accomplishments designed to accomplish an aspect of a stated goal in a ~~specific~~ time period.

O.G.C.: Office of General Counsel.

O.L.S.: Outside Legal Services.

O.P.S.: Outside Purchased Services-refers to anticipated cost to the chemical industry for outside consultants delivering a product designed to assist the chemical industry in advocacy efforts.

OSHA: Occupational Safety and Health Administration.

PAVE: Programs to Assess Volatile Emissions.

PENWG: Permitting, Enforcement and Nonattainment Work Group.

PSD: Prevention of Significant Deterioration.

POSSEE: Plant Organizational Software System for Emissions from Equipment.

RARM: Risk Assesement and Risk Management.

RCRA: Resource Conservation and Recovery Act.

Reg/Neg: Regulatory Negotiations.

Residual Risk: Term refers to potential impact of chemicals released from the facility after passing through control equipment.

Risk Assessment: A process to evaluate the potential impact of chemical releases to the environment on communities in the environment using an established process that considers concentration, dose and receptor condition among other parameters.

SAB: Science Advisory Board.

SARA: Superfund Ammendments and Reauthorization Act.

SIP: State Implemented Plan.

SOCMI: Synthetic Organic Chemical Manufacturing Industry.

STAPPA/ALAPCO: State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution-Control Officials.

Tech.: Technical.

TSDF: Treatment Storage and Disposal Facilities.

WG: Work Group.

Work Product: Hard copy results of specific actions.

WWT: Waste Water Treatment.