OCCUPATIONAL HEALTH COMMITTEE OHC-47

Minutes of Meeting

MCA Conference Room Washington, D. C.

May 6, 1971

MEMBERS PRESENT:

E. M. Dixon, M. D., Chairman	Celanese Corporation
N. V. Hendricks, Vice Chairman	Standard Oil Company (New Jersey)
E. E. Christofano	Hercules Incorporated
M. R. Gasque, M. D.	Olin Corporation
K. S. Lane, M. D.	Union Carbide Corporation
W. J. Martin, M. D.	Cyanamid of Canada Limited
W. E. McCormick	The B. F. Goodrich Company
R. W. McNab	BASF Wyandotte Corporation
K. M. Morse	United States Steel Corporation
F. L. Oglesby	Tennessee Eastman Company
T. R. Torkelson	The Dow Chemical Company
J. H. Wolfsie, M. D.	UNIROYAL, Inc.
G. J. Stopps, M. D.	E. I. du Pont de Nemours & Co.
K. D. Johnson, Secretary	Manufacturing Chemists Association

GUESTS PRESENT:

M. W. Andreson	American Cyanamid Company
J. E. Long	Minnesota Mining & Manufacturing Co.
F. Canuto (Translator)	Rainbow Systems, Inc.
P. L. Viola, M. D.	Solvay & Cie., Livorno, Italy

MEMBERS ABSENT:

John Hogan, M. D.	Gulf Oil Corporation
M. N. Johnson, M. D.	Monsanto Company

1. Minutes of the Meeting of September 10-11, 1970.

The Secretary presented an oral summary of the minutes notes of the subject meeting, apologizing for the oversight that had resulted in a failure to secure reproduction and distribution of the minutes on a timely basis. These minutes will be distributed concurrently with those of the present session.

2. Changes in Membership

The loss of Dr. G. F. Stopps from the Committee because of his resignation from Dupont, and of Dr. George Levinskas, by reason

of expiration of his term of membership were announced to the Committee.

Nominations for vacancies which will occur in June have been submitted for the following:

Dr. Lee B. Grant - PPG Industries, Inc.
Dr. C. F. Reinhardt - E. I. du Pont de Nemours & Company
Dr. J. E. Long - Minnesota Mining and Manufacturing Company

Their memberships are scheduled for Board confirmation on May 11.

Mr. M. W. Andresen, of American Cyanamid, was nominated for a vacancy which will occur September 12.

The Committee, by motion duly made, seconded and carried, recommended favorable action by the Board on pending nominations.

3. Federal Implementation of the Occupational Health and Safety Act

Mr. Vernon Rose, of the Public Health Service, was unable to accept the Committee's invitation to address this meeting because of a conflicting prior engagement.

Mr. Hendricks offered to draft letters to be sent to the Department of Labor and to the Department of Health, Education, and Welfare offering MCA cooperation, particularly in the area of the qualifications of inspectors, and industry assistance in providing for the training of them.

The recently announced organization of, and appointment to, the Department of Labor Occupational Safety and Health Administration are shown on the following page.

As soon as the new organizational chart for HEW's National Institute for Occupational Safety and Health is available, it will be forwarded to the Committee.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION APPOINTMENTS AND CHART OF ORGANIZATION

Assistant Secretary of Labor for Occupational Safety and Health – George C. Guenther, formerly Director of the Bureau of Labor Standards.

Acting Director, Office of Program Operations – Robert D. Gidel, formerly Deputy Director of the Bureau of Labor Standards.

Acting Director, Office of Policy Development – Albert J. Angebranndt, formerly Deputy Director, Office of Management Systems, Office of Financial Management of the Manpower Administration.

Acting Director, Office of Safety and Health Standards – Patrick F. Cestrone, formerly Chief, Office of Standards Development, Bureau of Labor Standards.

Acting Director, Office of State Programs – Thomas C. Brown, formerly Director of the Office of Program Development, Workplace Standards Administration

Acting Director, Office of Compliance – Eugene L. Newman, formerly Chief of the Bureau of Labor Standards' Office of Training.

Acting Director, Office of Training and Education – To be named.

Acting Director, Office of Program Management Services – Barry J. White, formerly Director, Office of Management Systems and Services, Workplace Standards Administration.

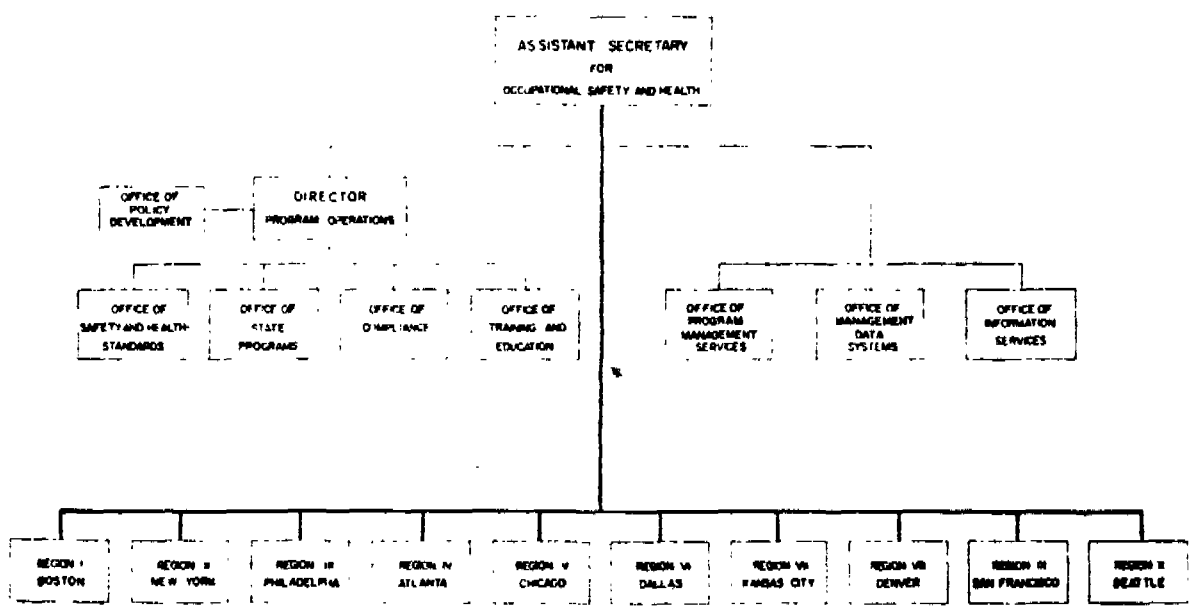
Acting Director, Office of Information Services – To be named.

Other Labor Department personnel participating in the program include:

Associate Solicitor for Occupational Safety and Health – Benjamin W. Mintz, formerly Special Assistant to the Solicitor of the Department of Labor.

Associate Commissioner of the Bureau of Labor Statistics for Occupational Safety and Health – Thomas McArdle, formerly Bureau of Labor Statistics Regional Director in Chicago.

ORGANIZATION OF OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION



CMA 039845

4. MCA Implementation of the Occupational Health and Safety Act

4.1 Collaboration with the Public Health Service National Surveillance Network

Mr. Hendricks reported on the conference held with Mr. Rose and staff in Cincinnati. MCA had been represented at this conference by Dr. E. M. Dixon, N. V. Hendricks, and K. D. Johnson of the MCA staff. Their program was described as an information-gathering effort. rather than as an enforcement tool, in that it would seek to focus attention and set advanced priorities on classes of industries and occupations, rather than on specific plants or industrial installations.

A copy of the field investigation outline guide was circulated around the Committee for inspection.

4.2 National Association of Manufacturers Closed-Circuit TV Program on the Occupational Health and Safety Act of 1970

Brochures describing the subject program scheduled for June 10, 1971, were distributed to the Committee.

4.3 Workshop for Chemical Industry

Dr. Gasque discussed possible types of workshops that had been considered by his subcommittee. Mr. F. G. Stephenson, MCA staff representative to the Safety and Fire Protection Committee, came in to describe the workshop his committee had scheduled for September 28, 1971 in New Orleans, and invited the Occupational Health Committee to consider joint sponsorship.

The Committee voted to authorize a subcommittee to work with the Safety and Fire Protection Committee to develop a suitable program for a jointly sponsored workshop that would be focused on the problems, particularly for the smaller companies, that the implementation of the Occupational Health and Safety Act would occasion. It was suggested that the workshop be set up along lines paralleling the structure of the Daniels-Steiger Act.

In addition to the jointly sponsored workshop in New Orleans, the Committee voted to request a panel on this topic at the MCA semi-annual meeting in November, and requested Dr. Gasque's committee to consider a series of additional workshops in other sections of the country.

5. Occupational Health Legislation in the 92nd Congress

The Committee was informed of the major interest in noise control legislation in the present Congress.

The appointment of an Ad Hoc Committee on Chemicals Regulation was reported, and members identified. Ad Hoc Committee members were invited to submit comments either directly to the staff representative, Dr. K. D. Johnson, or through Dr. William Sutton, a former Occupational Health Committee member now serving on the Ad Hoc Committee.

6. American Conference of Governmental Industrial Hygienists TLV's

Proposed revisions to be incorporated in the 1971 TLV's have been distributed to the Committee, and there was no discussion of these suggested changes. The new edition of supporting data for the TLV's has been published. MCA's library copy was circulated among the members for their review and information.

7. Proposed International Labor Organization Convention on Benzene

It now appears that the American delegation to the June meeting of the ILO will be prepared to handle this question without direct support from the Occupational Health Committee. Members with specific points they may wish to urge were asked to get in touch with the American Petroleum Institute advisor to the delegation, through Dr. Golz of the API staff.

8. Election of Officers

The chairman appointed the following as a committee on nominations:

W. J. Martin, Chairman
T. R. Torkelson
F. L. Oglesby

After the luncheon, the nominating committee submitted the following nominees for the term of office from June 1, 1971 to May 31, 1973, inclusive:

Chairman.....N. V. Hendricks
Vice Chairman.....J. H. Wolfsie

It was moved, seconded and carried by unanimous vote that the report of the nominating committee be accepted. The Secretary was asked to inform the Association of the election results.

9. Report on PVC Acroosteolysis Registry Program

The Secretary reported that Dr. Dinman was disappointed in the rate at which 1970 data were being submitted by the participating companies. Those who have not yet submitted their data are requested to do so promptly. Present funding is expected to last until fall, at which time the sponsors must decide on how to find any continuation desired.

10. Report of the Epidemiology Subcommittee

10.1 Conference with Dr. P. L. Viola

Mr. McCormick presented a concise, but detailed summary, of the discussions between the Epidemiology Subcommittee and Dr. Viola on the preceding day. (The translator provided simultaneous translation of Mr. McCormick's remarks, so that the former could correct any information presented by Mr. McCormick that Dr. Viola felt did not accurately portray the findings or opinions he had related to the subcommittee through the translator.)

He began with a review of the history of MCA concern, from the presentation of Dr. Viola's paper in Houston in April, through the discussions of the Committee at its Montreal meeting, the attempt of the Epidemiology Subcommittee to develop a protocol at its February meeting, and the final decision to invite Dr. Viola to come to the United States.

After summarizing Dr. Viola's professional background and present position as industrial physician for Solvay's Italian operations and volunteer staff researcher at the Regina Elena Institute for Cancer Research in Rome, he told how Dr. Viola had began his studies in an attempt to determine whether the acroosteolysis observed in autoclave cleaners was the result of inhalation of vinyl chloride monomer vapors during that operation.

Dr. Viola was surprised to observe in the rats exposed to the monomer vapors not only bone changes that he interpreted as related to those seen in human acroosteolysis, but ear tumors (first identified as originating in the Zymbal cells of the external ear canal) and lung tumors. Subsequently, Dr. Viola has expressed the view that the salivary glands may be the site of initial tumor development.

Dr. Viola's original studies involved exposures to 30,000 ppm (V/V) of vinyl chloride monomer vapors, 4 hours per day, for 5 days per week. Tumors were observed in some animals as early as the tenth month. Although impurities in his monomer ranged up to 3 percent (900 ppm), Dr. Viola did not feel that the responses he observed were related to the impurities present. A number of OHC members expressed a contrary view, and held that the available evidence did not justify the exclusion of this possibility.

Subsequent studies have led Dr. Viola to judge that the threshold level for the responses he observed might lie in the range of 2,000 to 5,000 ppm. Ongoing studies cover the range from 2,000 to 10,000 ppm.

A discussion of the significance of Zymbal cell tumors followed. Committee experts conceded that no equivalent structures exist in the human, but that past experience had demonstrated that some human carcinogens, particularly bladder carcinogens, such as the aromatic amines, were known to cause Zymbal cell tumors in the rat.

Mr. McCormick presented to the subcommittee recommendations that: (1) the following protocol be approved, (2) firm price proposals be secured from the research laboratories that had earlier indicated an interest, (3) the representatives of the vinyl chloride and polyvinyl chloride manufacturing companies be convened to discuss the problem, (4) that they be asked to approve the project and volunteer financial support therefor, and, (5) that MCA be asked to administer this program, with the guidance of a steering committee from the sponsors.

On motion duly made, seconded and carried, the full Committee accepted the recommendations of the Subcommittee and directed the Secretary to begin their implementation.

The experimental protocol recommended involves exposures of two species of animals, mice and rats, to three levels of vinyl chloride monomer vapor concentrations, with concurrent study of monomer derived from acetylene and ethylene processes.

Exposure Levels: 10,000 - 5,000 - and 1,000 ppm (V/V)
or 5,000 - 1,500 - and 500 ppm (V/V)

(to be resolved before start of program on basis of Dr. Viola's results from his 10,000, 5,000, and 2,000 ppm studies)

Test Animals: Weanling rats, Wistar strain
Weanling white mice, of a strain not highly susceptible to spontaneous tumors

Each species equally divided between the sexes in each experimental group.

Size of Experimental Groups:

Highest Level	60 animals, each species, each test material
Intermediate Level	200 animals, each species, each test material
Lowest Level	200 animals, each species, each test material
Control Group	200 animals, each species

(Single control group to serve for both series)

Exposure Duration:

Rats: 4 hrs/day; 5 day/week, 24 months
Mice: 4 hrs/day; 5 day/week, 12 months

Complete gross and microscopic pathology studies to be performed on all spontaneous deaths during experiment and on surviving animals to be sacrificed at conclusion of study.

10.2 Epidemiology Survey

The subcommittee renewed its plea for an MCA sponsored study of the health of the worker in the chemical industry. An early step in the planning for any such study involves an agreement on how "chemical industry" and "chemical worker" are to be defined.

The subcommittee was asked to develop a proposal for such a survey, and it was suggested that the progress already made in planning for the API and NACA surveys would provide helpful guidance.

Mr. Hendricks has submitted two brief papers presenting suggested routes to and the justifications for such a study. They are entitled "Notes on MCA Epidemiology Survey" and "Health of the Chemical Worker," are are reproduced in the appendix to these minutes.

11. Old Business

Dr. Torkelson reported that results from the present studies on phenol decontamination, with a comparison of glycerine with water as a decontamination agent, would be available for presentation to to the Committee at its next meeting.

The results of the Mellon Institute study of the efficacy of hexamethylenetetramine as a therapeutic agent in the treatment of phosgene poisoning have been distributed to the Committee by Dr. Lane. This report indicates the agent has limited value as a prophylactic agent but none as a therapeutic agent when tested on rats exposed to lethal phosgene vapor concentrations.

12. New Business

Mr. Hendricks offered to draft a letter in response to the request made by the Poison Control Center for one or more workshops with the chemical industry. It was the consensus of the Committee that workshops were not the most effective means of liaison with this organization.

Dr. Dixon informed the Committee that he will be presenting the Committee report to the MCA Board at its meeting in New York on May 11, and invited members to suggest any matters appropriately brought to their attention at that time.

The Committee expressed its regrets to Dr. Stopps at losing him from the Committee and from the American scene, and wished him well in his new position with British Petroleum.

It also extended a vote of thanks to Dr. Dixon for his leadership during his term as chairman, and bade him farewell as he leaves the Committee.

13. Meeting Schedule

It was voted to hold the next meeting of the Committee on Wednesday, September 29th, at the Monteleone Hotel in New Orleans, in conjunction with the joint Safety and Fire Protection and Occupational Health Committee's Workshop on the 28th.

Respectfully submitted,

Kenneth D. Johnson
Secretary
Occupational Health Committee

Minutes Subject to approval

August 6, 1971

KDJ/cj

APPENDIX A

NOTES ON MCA EPIDEMIOLOGY SURVEY

There has been a lot of static from the Committee with very little constructive suggestions on how we might proceed with our plans for epidemiological work. Some of the preliminary steps have already been undertaken, such as a draft of the need and justification for this kind of information. I am trying to suggest the following items so some kind of sequence of additional steps could be undertaken.

One of the first things that would have to be done is to prepare a strong justification showing the need for this kind of information and our plans for getting it, and this would be presented to the appropriate MCA body, likely the Doan Environmental Committee or the MCA Board. It would be a waste of time to try and plan specific steps without first having this approval. It ought to be brought to mind that approval of a project of this kind carries with it a commitment for a considerable investment, perhaps in the order of $30-50,000.

Assuming that MCA approval is obtained, then the first order of business is to do a preliminary survey or feasibility study which would be designed to--

a. Determine existence of suitable records within the chemical industry.

b. Evaluate such records in terms of method of coding and extraction of information.

c. Willingness of individual companies to cooperate with the study.

It would be necessary to go to an outside concern having expertise in epidemiology and arranging with them to undertake this work. There are several possible sources of this kind of help including New York University, University of Michigan, University of North Carolina and Harvard University.

Once information became available as to methods used in recording information of medical experience, appropriate questionnaires could be designed to extract this information making use of the various coding systems adopted by the individual companies.

From these records there should come documentation of morbidity and mortality in the various groups and in comparative control groups.

The questionnaire or form would also contain information as to the nature of the individuals, employment and the type job that he had.

In connection with the above, various job classifications could be reviewed by the Committee on Occupational Health in order to establish potential for exposures incident to the various job duties.

A literature survey would be undertaken in order to make use of any reference material or work previously done .

Once the mechanism for obtaining the information were developed, then the Medical Directors of the various participating companies should be invited to meet for the purpose of reviewing and commenting on the plans and becoming familiar with how they could most effectively cooperate.

In soliciting cooperation and participation in the individual companies, a strong letter from the MCA should go to the member companies indicating the need and urgency for this work.

Perhaps as much as $5000 might be necessary for the feasibility study and this should be sufficiently complete so that from it the overall epidemiological study could be developed.

In the concept of extracting information from a company's medical records, it is anticipated that the participating company would furnish the services of a clerk or similar personnel for this purpose rather than the study team becoming involved with these details. There are a number of reasons justifying this including the fact that likely a company would not want outside personnel having access to their medical records.

Once approval from MCA was given and agreement reached on the pattern of the survey, it would likely take several months to complete the feasibility portion of the project.

It is my understanding that the API is planning a similar study and this raises a question about the chemical operations of some of these refineries being included in these studies and the possibility of these companies making this information available to the MCA, it would avoid a duplication should those companies participate in the MCA study as well as the API study. This should be discussed by the committee.

N. V. Hendricks

APPENDIX B

HEALTH OF THE CHEMICAL WORKER

Historically, exposures to selected chemicals have been studied and health effects have been established. These have been well documented for a number of individual materials such as lead, mercury, arsenic, benzene and others. With the increasing production and use of chemicals, there are exposures to many materials that have neither been studied nor health response evaluated. This has led to questions from several quarters as to health risks associated with chemical operations and the overall question as to the health status of workers in the chemical industry. Concern over these issues is shared by the chemical industry, the chemical workers, unions and governmental agencies.

The chemical industry has long recognized the health risks in its operations and has assumed the responsibility for dealing with these, both on a company and industry basis. This is evidenced by the medical and environmental health programs established in many chemical companies, and programs and committees of the MCA. There is, however, a recognized need on the part of industry for better information concerning the health of its workers, especially in terms of any health implications that might be related to various chemical operations.

Employees in the chemical industry are concerned about their health as the number of chemicals produced and used in the industry increases along with an awareness of the potential risk to health. This probably has been encouraged by the recent concern with the environment that is so widespread.

The unions are raising serious questions, along with accusations, concerning exposures and risks in chemical plants. They are using this background to give strong support to the proposed federal legislation on Occupational Safety and Health and are requesting special provisions to be put in any such legislation.

Government concern is evident in the proposed Occupational Safety and Health Act, the Walsh Healey Regulations and other recently developed regulations. In addition, there are many implications in the National Surveillance Network being planned and developed by the U. S. Public Health Service. This program would apply to all industry and is designed to answer three questions--

1. What is the status of the health of workers?

2. What are the working conditions?

3. Is there a relationship between these?

The factors described above and the climate producing them pose serious implications for the chemical industry and would appear to call for some action by the industry. These issues have been brought sharply into focus and have increased greatly in importance as a result of the new Occupational Safety and Health Act.

The central thrust or question being raised is whether or not the occupational environment in the chemical industry affects the health of the worker--or is the health of the chemical worker different from that of the general population. In light of the circumstances, it would appear highly desirable, if not necessary, for the industry to develop information to answer some of the questions related to this issue. Epidemiological studies represent the only presently available means of obtaining certain types of information on the health status of the chemical worker. It is by these techniques that any long-range relation between health and the work environment can be evaluated.

N. V. Hendricks
April 30, 1971

Manufacturing Chemists Association

OCCUPATIONAL HEALTH COMMITTEE

Members

N. V. Hendricks, Chairman	Standard Oil Company (N. J.)
K. D. Johnson, Staff Representative and Secretary	Manufacturing Chemists Assoc.
W. V. Andresen	American Cyanamid Company
E. E. Christofano	Hercules Incorporated
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T. R. Torkelson	The Dow Chemical Company

8/5/71

OCCUPATIONAL HEALTH COMMITTEE ADDRESS LIST

William V. Andresen (Bill) Director, Industrial Hygiene - Safety	American Cyanamid Co. 859 Berdan Avenue Wayne, New Jersey 07470 201 831-1234 x 3019	489 Pepperidge Tre Terrace, Smoke Rise, N. J. 07405 201 838-6463
Emil E. Christofano (Chris) Industrial Hygienist	Hercules Incorporated 910 Market Street Wilmington, Del. 19899 302 656-9811 x 8368	11 Plover Ct. Brookemeade Wilmington, Del. 19808 302 999-1183
Dr. Mac Roy Gasque Director, Medical Services	Olin Corporation 120 Long Ridge Road Stamford, Conn. 06904 203 356-2561	113 Heritage Hill Road New Canaan, Connecticut 06840 203 966-0819
Dr. Lee B. Grant Medical Director	PPG Industries, Inc. One Gateway Center, 14 N. Pittsburgh, Pa. 15222 412 434-3846	1811 Tyris Drive Pittsburgh, P Penna. 15241 412 221-8540
N. V. Hendricks (Van) Assistant Director for Environmental Sciences	Standard Oil Co. (N.J.) 30 Rockefeller Plaza New York, New York 10020 212 974-2786	132 Tennyson Dr. Short Hills, New Jersey 07078 201 379-5371
Dr. John F. Hogan Eastern Regional Medical Director	Gulf Oil Corporation P. O. Box 8056 Philadelphia, Pa. 19101 215 839-6111 x 418	848 Park Ridge Rd. Media, Pa. 19063 215 643-3379 (until 7/29/71)
Dr. Kenneth D. Johnson (Ken) Chemical Engineer	Manufacturing Chemists Association 1825 Connecticut Ave., N.W. Washington, D.C. 20009 202 483-6126 x 244	10300 Dunfries Rd. Vienna, Virginia 22180 703 281-4470
Dr. M. N. Johnson Assistant Medical Director	Monsanto Company 800 North Lindbergh Blvd. St. Louis, Mo. 63166 314 694-2188	52 River Bend Ct. Route 2 Chesterfield, Missouri 63017 314 469-3349

Dr. Kenneth S. Lane Assistant Medical Director	Union Carbide Corp. 270 Park Avenue New York, N. Y. 10017 212 551-4787	106 Seven Bridges Road Chappaqua New York 10514 914 666-3656
Dr. James E. Long (Jim) Manager, Toxicology	Minnesota Mining & Manufacturing Co. Chemical Division 3 M Center - Bldg. 220-2E St. Paul, Minn. 55101 612 733-7635	2674 N. Riviera Dr. White Bear Lake, Minnesota 55110 612 429-9638
Dr. William J. Martin Director, Medical Services	Cyanamid of Canada, Limited Welland Plant P. O. Box 240 Niagara Falls, Ontario, Canada 416 358-3681 x 351	2236 Clare Crescent Niagara Falls Ontario, Canada 416 358-8235
William E. McCormick (Bill) Manager, Environmental Control	The B. F. Goodrich Co. 500 S. Main Street Akron, Ohio 44318 216 379-2562	419 Dorchester Road Akron Ohio 44320 216 864-4857
Warren McNab Industrial Hygienist	BASF Wyandotte Corp. P. O. Box 111 Wyandotte, Mich. 48192 313 282-3300 x 7347	8337 Glengarry Rd. Grosse Isle, Michigan 48138 313 676-5367
Kenneth M. Morse Dir. of Environmental Health	U. S. Steel Corp. 600 Grant Street, Rm. 2518 Pittsburgh, Pa. 15230 412 433-6836	1296 Pinewood Dr. Pittsburgh, Pennsylvania 15243 412 276-4219
F. L. Oglesby (Frank) Senior Industrial Hygienist	Tennessee Eastman Co. P. O. Box 511 Kingsport, Tenn. 37662 615 246-2111 x 3825	3053 Cliffside Rd. Kingsport, Tennessee 37664 615 245-5447
Dr. Charles F. Reinhardt Assistant Director - Haskell Laboratory	E. I. du Pont de Nemours and Company Haskell Laboratory 1007 Market Street Wilmington, Del. 19898 302 366-3575	1714 Forestdale Drive Twin Oaks Wilmington, Delaware 19803 302 764-6877

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Dr. T. R. Torkelson
(Ted)
Senior Research
Toxicologist

The Dow Chemical Co.
Biochemical Research
Laboratory
1803 Building
Midland, Mich. 48640
517 636-5197

5300 Nurmi Drive
Midland,
Michigan 48640
517 835-1354

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