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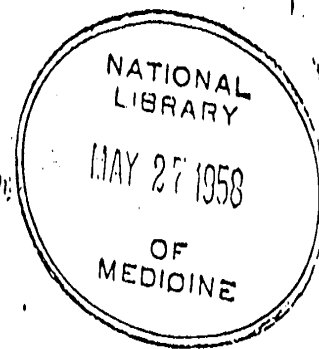
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INDUSTRIAL

HYGIENE

FOUNDATION

Activities



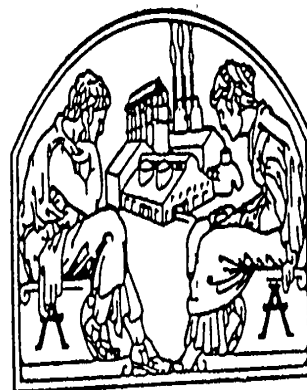
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Industrial Hygiene Foundation Activities



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INDUSTRIAL HYGIENE FOUNDATION

What It Is

INDUSTRIAL HYGIENE FOUNDATION is a nonprofit research association of industries for advancing occupational health, improving working conditions and bettering human relations.

Organized in 1935 at Mellon Institute to assist in solving the silicosis problem, the Foundation has since had wide experience in the whole domain of occupational health. It has grown from a nucleus of 20 member companies to more than 400 supporting companies and trade associations representing leading industries of the nation.

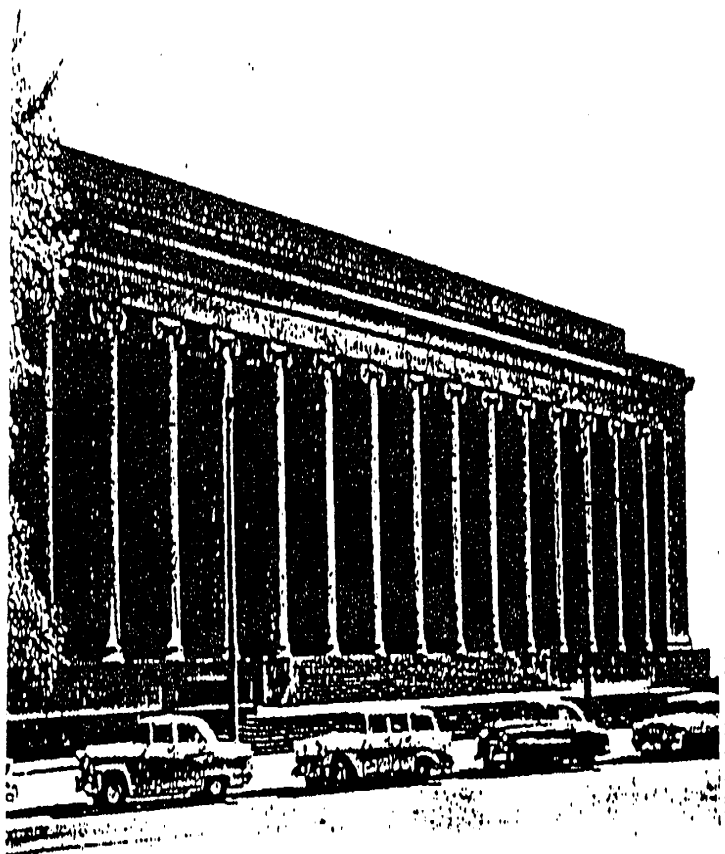
Companies and associations affiliated with the Foundation are entitled to the services of its industrial health team, plus the technical facilities of Mellon Institute, where the Foundation has its headquarters and laboratories.

The I-H-F Staff and Associates

Physicians, chemists, engineers, industrial hygienists, biochemists and research technicians—all specialists in occupational health problems.

Five professional committees—medical, preventive engineering, legal, chemical-toxicological, and air pollution control—whose members supplement the staff in supplying facts and counsel.

A Board of Trustees comprised of top echelon leaders in technology, science, and education, who administer the Foundation's affairs in general.



Mellon Institute
Headquarters of Industrial Hygiene Foundation

Services to Member Companies

- Study and solution of specific industrial health problems
- Environmental surveys
- Control of hazards
- Development of health and medical programs tailored to individual company requirements
- Basic research in physiology, toxicology and biochemistry and in the field of air pollution
- Specific toxicological studies
- All types of air-pollution investigations
- Collaboration in operations researches
- Reports on legal developments in industrial health
- Technical information service
- Publications
- Annual meeting and technical conferences

Annual Meeting of I-I-F in Mellon Institute Auditorium



FOUNDATION ACTIVITIES

Medical Services

GENERAL INFORMATION is available from the Foundation on all matters pertaining to health maintenance services and to specific industrial medical problems.



CONSULTATION is provided dealing with the establishment, expansion and conduct of medical programs in industry.

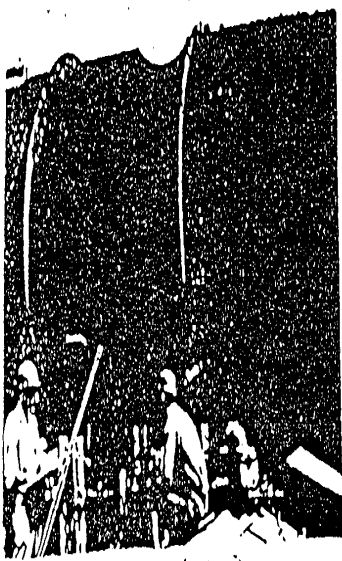


MEDICAL EVALUATIONS made by the Foundation for member companies serve to determine what is adequate for the health maintenance needs of an organization and its component plants, and to assure that the greatest amount of efficient, proper service is obtained for a given outlay of money.

Such audits include studies of organizational and administrative practices in industrial health services, inspection of medical facilities, interview of personnel in all areas relating to medical services and thorough examination of records of employment, illness and injury, with tabulation of costs where possible. Potential hazards are evaluated and physical examinations are designed with these and other pertinent factors in mind. In every instance recommendations are made with respect to a medical program suited to the needs of the company.



EPIDEMIOLOGICAL STUDIES are conducted to determine the relationship of certain diseases to occupation. Incidence rates of those diseases are related to possible causes by statistical methods.



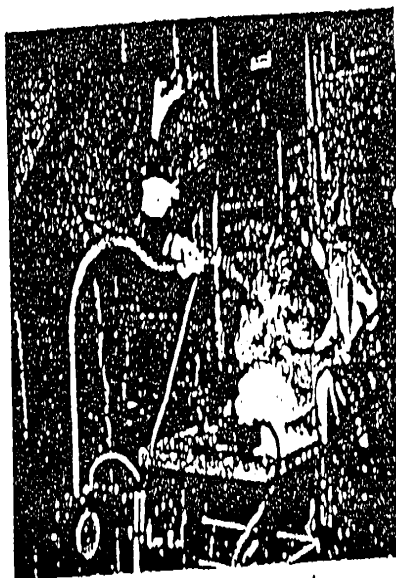
measuring air flow in a duct



Determining radiant heat



Separating respirable dust into size fractions



Collecting metal fumes with electrostatic precipitator

Industrial Hygiene Services

ENVIRONMENTAL SURVEYS—many on an industry-wide scale—are conducted for members, as are plant studies on specific phases of industrial health problems. The nature and magnitude of hazardous exposures and the effectiveness of control measures are appraised.

I-H-F industrial hygienists and chemists measure and analyze dusts, fumes, gases, vapors and odors, noise and radiant heat; and, together with the medical staff, evaluate the hazards involved.

The engineering division is equipped to advise on control requirements for specific operations and on modifications in process—minimize, or, whenever possible, to eliminate environmental hazards.

The Foundation's industrial health specialists are called on to:

Give specialized advice on new plant design and construction and reconstruction in existing plants in order to make health protection an integral part of operations.

Conduct field tests of new control measures.

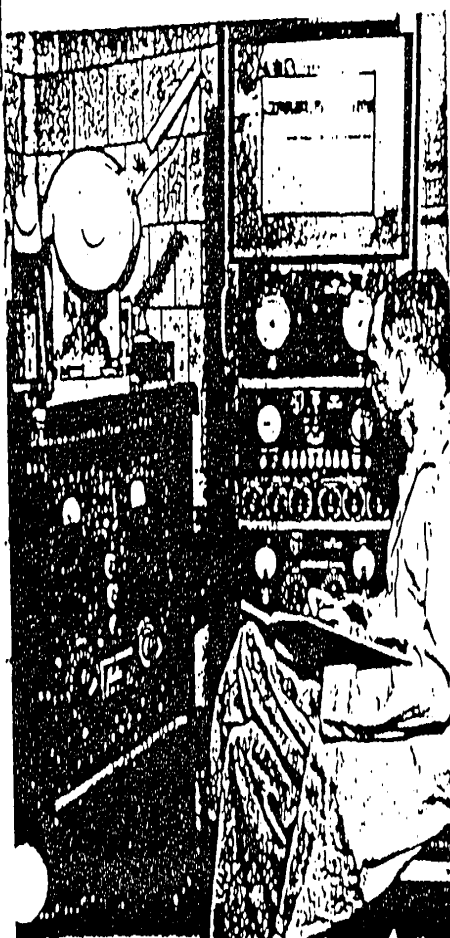
Review plans for ventilating systems, as to design, capacity, etc.

Advise on special air-cleaning problems.

Develop new data and design procedures for exhaust hoods.

Provide information and advice on toxicity of chemical and physical agents; on hazards of particular processes; and on sampling and analytical procedures, choice and availability of equipment.

Conduct basic research in the field of industrial hygiene to develop new sampling and analytical methods and techniques.



☐ Air Pollution Investigations

Closely allied with the industrial hygiene and engineering activities of the Foundation are its investigations into industrial air-pollution problems. Important parts of this activity are:

City, community and regional surveys.

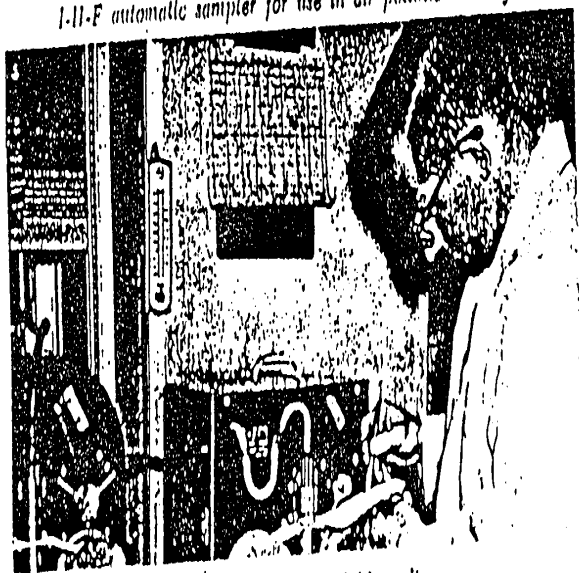
Advice on specific problems—investigational procedures and criteria.

Development of methods, apparatus and techniques for collecting and measuring air pollutants.

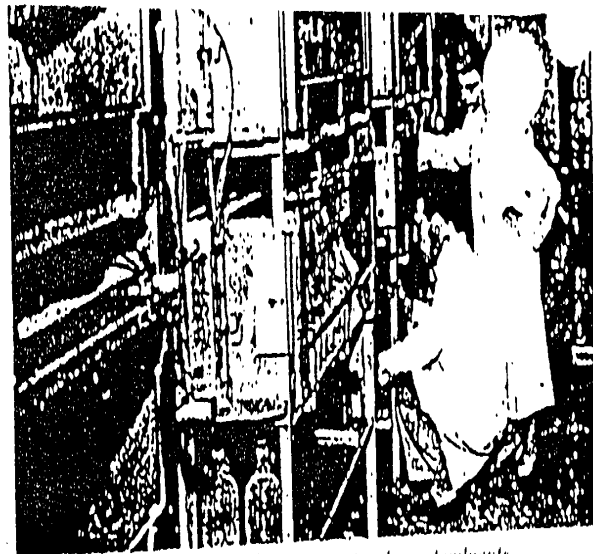
Investigation of air pollution potentials of plants—measurement of stack dusts, fumes, gases and odors. Estimation of neighborhood effects.

Assistance in engineering measures for controlling excessive stack emissions. Study of particle size and other characteristics of stack dusts and their relation to appropriate dust collectors.

I-11-F automatic sampler for use in air pollution surveys



Mobile laboratory for field studies



Studying biological responses to air contaminants

☐ Toxicological Research

The Foundation's toxicological laboratory makes studies in the physiology, toxicology, and biochemistry of physical and chemical agents, their mode of entrance into the body, and their subsequent possible toxic action. The findings serve as a basis for evolving proper control measures to protect the health of workers.

Short- and long-term toxicity studies on new chemicals to indicate nature of problems which may be encountered in manufacture and use are carried on in the laboratory.

Range-finding toxicity tests are made on new compounds



☐ Legal Assistance

The Foundation, through its General Counsel and its Legal Committee, keeps in contact with legislative activities pertaining to occupational diseases and compensation. Specific information desired by members is obtained.

Summaries of new compensation laws, revisions and additions are prepared.

New codes pertaining to health hazards and related problems are analyzed for members.

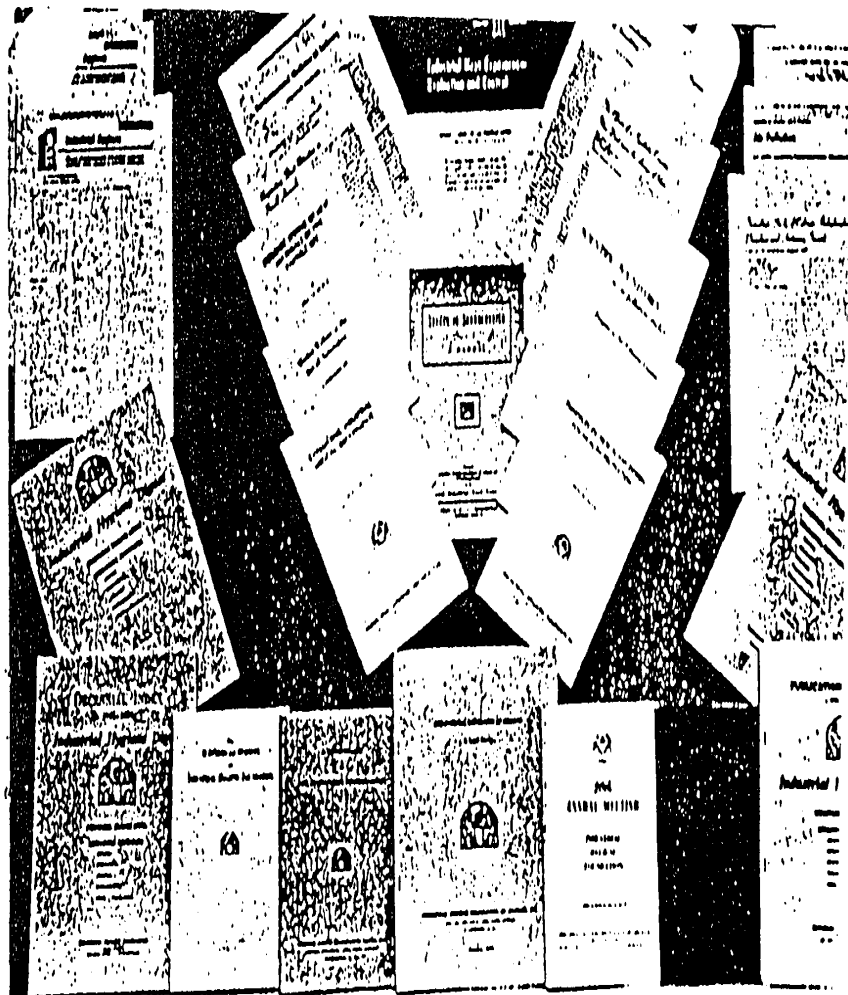
☐ Technical Information Service

Member companies are invited to tap the rich source of accumulated knowledge and experience represented by the Foundation's executive staff. A letter, telephone call or visit to the I-H-F offices will turn up an elusive bit of technical information or get to the roots of a perplexing problem.

The staff aids members in securing desired literature, prepares bibliographies, conducts literature searches, and secures information from other sources, as, for example, companies having related problems. Available reprints are supplied where they pertain to the information sought.

☐ Annual Meeting and Technical Conferences

Each year at its annual meeting the Foundation brings together at Mellon Institute nearly 700 executives, physicians, attorneys, engineers, chemists and industrial health specialists. This convention affords an opportunity to exchange valuable information on the year's achievements, trends and needs in the industrial health field, particularly at the Foundation's Medical, Legal, Engineering, and Chemical-Toxicological Conferences. The main session, which is intended for management, encompasses the broader objectives respecting human relations, socio-economic considerations and administrative policies in industrial health.



Publications of I-H-F are available to members free of charge

☐ Publications

Industrial Hygiene Digest, published monthly, carries abstracts of the current world's literature on all phases of industrial health, including the legal aspects.

☐
Special bulletins and pamphlets on subjects of current interest.

☐
Technical papers by staff members and other pertinent articles.

☐
Transactions of annual meeting.

☐ Representative Publications

Medical

"Evaluating Industrial Medical Departments," Daniel C. Braun, *Transactions of 20th Annual Meeting of Industrial Hygiene Foundation* (1955).

Toxicology, Physiology and Biochemistry

"Importance of Biological Research in Industrial Medicine," Paul Gross, C. Richard Walmer and H. H. Schrenk, *Journal of the American Medical Association* (June 18, 1956).

"Chemical Analysis and Instrumentation in Industrial Hygiene," H. H. Schrenk, *Industrial and Engineering Chemistry* (August 1956).

"Action of Formulations Consisting of Detergents in White Oil, upon Corneal Epithelium of Rabbits," A. M. A. *Archives of Industrial Health* (August 1956).

"Respiratory Dust Retention in Small Animals," Paul Palm, James McNerney and Theodore Hatch, *A. M. A. Archives of Industrial Health* (April 1956).

"Toxicologic Study of Calcium Halophosphate Phosphors and Antimony Trioxide," Paul Gross, J. H. U. Brown, Marian L. Westrick, Raymond P. Srsic, Nancy L. Butler and Theodore Hatch, *A. M. A. Archives of Industrial Health* (June 1955).

"Permeability of Lung Parenchyma to Particulate Matter," Paul Gross and Marian L. Westrick, *Year Book of Pathology and Clinical Pathology for 1954-55*.

"Partitional Respirometry," Theodore Hatch and Kenneth M. Cook, *A. M. A. Archives of Industrial Health* (March 1955).

"Biologic Testing of New Materials of Fine Particle Size," Paul Gross, *Transactions of 19th Annual Meeting of Industrial Hygiene Foundation* (1954).

Air Pollution

"Pitfalls in Using Maximum Allowable Concentrations in Air Pollution," H. H. Schrenk, *American Industrial Hygiene Association Quarterly* (September 1955).

"Developments in the Sampling of Air-Borne Dust," Theodore Hatch, *A. M. A. Archives of Industrial Health* (March 1955).

"Permissible Dustiness," Theodore Hatch, *American Industrial Hygiene Association Quarterly* (March 1955).

Engineering

"Proposed Program in Ergonomics . . . Human Engineering," Theodore Hatch, *Mechanical Engineering* (May 1955).

"Index for Evaluating Heat Stress in Terms of Resulting Physiological Strains," by H. S. Belding and Theodore Hatch, *Heating, Piping & Air Conditioning* (August 1955).

Noise

Annotated Bibliography on Noise, Its Measurement, Effects and Control, 364 pages, 2,330 references, published by Industrial Hygiene Foundation (1955).

Occupational Impairment of Hearing—A Legal Survey, Theodore C. Waters, General Counsel for I-H-F, published by Industrial Hygiene Foundation (1955).

Automation

"Worker Welfare in the Era of Automation," C. Richard Walmer, published in *Keeping Pace with Automation, Practical Guides for the Company Executive*, Special Report No. 7 of the American Management Association (1955).

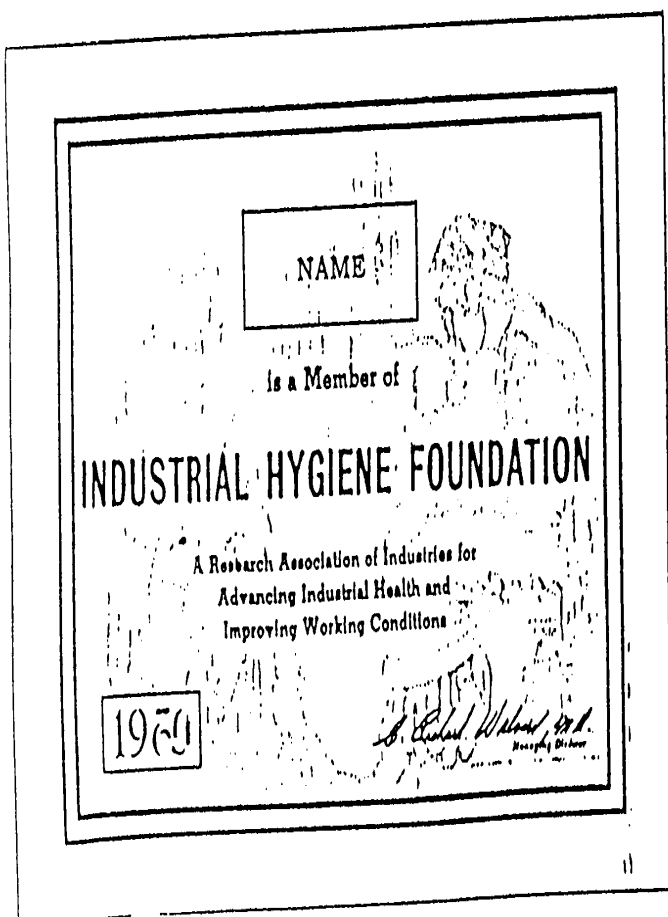
"Medical Aspects of Automation," C. Richard Walmer, *Industrial Medicine and Surgery* (May 1955).

Types of Membership in I-H-F

COMPANY: Membership in Industrial Hygiene Foundation is available to industrial organizations. Where a company has a number of plants, all of them share in the benefits of membership. Dues are scaled to the number of employees. The Foundation's membership roster represents more than 3,000,000 industrial workers.

ASSOCIATION: An association of employer firms or corporations may affiliate either through an association membership, which entitles that organization to all the publications, general advice and attendance at annual meetings; or by a multiple membership, which extends all the benefits of membership to each company belonging to that association.

SUBSCRIPTIONS: Subscriptions to Foundation publications are restricted to governmental agencies and to medical, health, research and educational institutions.



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-A-

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Abrasive Grain Association
Abrasive & Metal Products Company
 Peninsular Grinding Wheel Division
Abrasive Products Company
Acme Abrasive Company
Aircraft-Marine Products, Inc.
Allegheny Ludlum Steel Corporation
Allegheny Pittsburgh Coal Company
Allied Chemical & Dye Corporation
Allis-Chalmers Manufacturing Company
Aluminum Company of America
American Abrasive Company
American Air Filter Company, Inc.
American Brake Shoe Company
American Can Company
American Emery Wheel Works
American Foundrymen's Society
American Iron & Steel Institute
American Mining Congress
American Optical Company
American Radiator & Standard
 Sanitary Corporation
American Smelting & Refining Company
American Zinc Institute
American Zinc, Lead & Smelting Company
Anaconda Company
Asbestos Corporation Limited
Assn. of Casualty & Surety Companies*
Assn. of American Railroads
Assn. of American Soap & Glycerine
 Producers, Inc.
Atlas Powder Company
Automobile Manufacturers Association

-B-

Ball Brothers Company
Bartlett-Collins Company
Baugh Chemical Company
Bay State Abrasive Products Company
Beryllium Corporation
Bethlehem Steel Company, Inc.
Bird & Son, Inc.
Bituminous Casualty Corporation
Boeing Airplane Company
Brush Beryllium Company
George H. Bullard Company
Bunker Hill & Sullivan Mining &
 Concentrating Company

*Multiple Membership

-C-

Can Manufacturers Institute, Inc.
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Celanese Corporation of America
Central Silica Company
Chicago Wheel & Manufacturing
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Chromium Mining & Smelting Corp., Ltd.
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 Cincinnati Milling Products Division
Cleveland-Cliffs Iron Company
Cleveland Graphite Bronze Company
Robert F. Coleman, Inc.
Colonial Abrasive Products Company
Commonwealth Sanitation Company
Consolidated Mining & Smelting
 Company of Canada, Ltd.
Continental Can Company, Inc.
Cooper-Bessemer Corporation
Copperweld Steel Company
Corhart Refractories Company, Inc.
Corn Products Refining Company
Cortland Grinding Wheels Corporation
Crown Zellerbach Corporation
Crucible Steel Company of America

-D-

Deckers Creek Sand Company
Deere & Company
A. P. de Sanno & Son, Inc.
Diamond Alkali Company
Dow Chemical Company
Dow Corning Corporation
B. F. Drakenfeld & Company, Inc.
Dravo Corporation

-E-

Eagle-Picher Company
Elasco Services, Inc.
Electric Storage Battery Company
Electro Refractories & Abrasives
 Corporation
Elex S. A.
Eljer Company
Equitable Life Assurance Society of
 the United States
Esso Research and Engineering Company
Ethyl Corporation
Exolon Company

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-F-

Fairbank Corporation
Fairbank Steel Company
Fairbank Incorporated
Fairbank Corporation
Fairbank Mineral Company
Fairbank Motor Company
Fairbank Glass Company
Fairbank Dry Goods Manufacturers Assn.
Fairbank Meridian Company
Fairbank Company

-G-

General Machine Company
General Abrasive Company, Inc.
General Ceramics Corporation
General Electric Company
General Grinding Wheel Corporation
General Mills, Inc.
General Motors Corporation
General Refractories Company
Georgia Kaolin Company
Henshaw Glass Company, Inc.
V. R. Grace & Company
Grinding Wheel Institute
Gulf Oil Corporation

-H-

Hall China Company
Hamilton Emery & Corundum Company
Hampton Grinding Wheel Company
Hazel-Atlas Glass Company
Hercules Powder Company
Hoerner Boxes, Inc.
Homestake Mining Company
H. Hommel Company

-I-

Industrial Indemnity Company
Industrial Silica Corporation
Inland Steel Company
International Business Machines Corporation
International Nickel Company, Inc.

-J-

Jeffrey Manufacturing Company
Johns-Manville Corporation
Johnson & Johnson
Jones & Laughlin Corporation
Johnson Company

-K-

Kearney & Mattison Company
Kennametal, Inc.
Kennecott Copper Corporation
Keystone Abrasive Wheel Company
Kirk & Blum Manufacturing Company
Edwin M. Knowles China Company
Koppers Company, Inc.

-L-

Lamar Loughlin China Company
Lava Crucible-Refractories Company
E. J. Lavino and Company
Lead Industries Association

-M-

Macklin Company
Magma Copper Company
Maryland Self-Insurers' Association
Mayer China Company
J. S. McCormick Company
Mechanical Industries, Inc.
Metropolitan Life Insurance Company
Mexican Refractories Company
Mid-West Abrasive Company
Mine Safety Appliances Company
Minneapolis-Honeywell Regulator Company
Jesse S. Morle & Son, Inc.

-N-

National Association of Mutual Casualty Companies
National Crushed Stone Association, Inc.
National Grinding Wheel Company, Inc.
National Industrial Sand Association
National Lead Company
National Pulverizing Company
National Sand & Gravel Association
National Sling Association
National Steel Corporation
Neville Chemical Company
New Jersey Pulverizing Company
New Jersey Zinc Company

-O-

Olin Mathieson Chemical Corporation
Ottawa Silica Company
Owens-Corning Fiberglass Corporation
Owens-Illinois Glass Company

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-P-

Pabst Brewing Company
Pacific Grinding Wheel Company
C. H. Packwood Manufacturing Company
Pangborn Corporation
Penn-Rilton Company
Pennsylvania Glass Sand Corporation
Pennsylvania Manufacturers' Association
Casualty Insurance Company
Pennsylvania Railroad Company
Phelps Dodge Corporation
Philadelphia Quartz Company
Phillips Petroleum Company
Pittsburgh Coke & Chemical Company
Pittsburgh Consolidation Coal Company
Pittsburgh Plate Glass Company
Pittsburgh Steel Company
Portland Cement Association
Precision Grinding Wheel Company, Inc.
Pullman Incorporated
Pyrene Metal Finishers, Inc.

-R-

Radio Corporation of America
Raybestos-Manhattan, Inc.,
Manhattan Rubber Division
United States Asbestos Division
Red Hill Grinding Wheel Corporation
Refractories Institute
Rem-Cru Titanium, Inc.
Republic Steel Corporation
Revere Copper and Brass Incorporated
H. H. Roberston Company
Robertson Manufacturing Company
Rome Cable Corporation

-S-

Safety First Supply Company
St. Joseph Lead Company
St. Regis Paper Company
Sand Products Corporation
Sandia Corporation
Sauerisen Cements Company
Claude B. Schneible Company
Scott Aviation Corporation
Sharon Steel Corporation
Shenango Furnace Company
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Sun Oil Company
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-T-

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Texas Company
Texas Gulf Sulphur Company
Titan Abrasives Company
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Trilon, Inc.

-U-

Union Carbide & Carbon Corporation
United States Pottery Association
United States Rubber Company
Abrasive Division
United States Smelting Refining &
Mining Company
United States Steel Corporation
Universal-Rundle Corporation

-V-

Valley Mould & Iron Corporation
Vesuvius Crucible Company
Vitrified Wheel Company

-W-

Wald Industries Inc.
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Washington Mills Abrasive Company
Wedron Silica Company
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-Y-

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