

INTERNATIONAL LEAD ZINC

RESEARCH ORGANIZATION, INC.

N11678

INTERNATIONAL LEAD ZINC RESEARCH ORGANIZATION, INC.

292 MADISON AVENUE

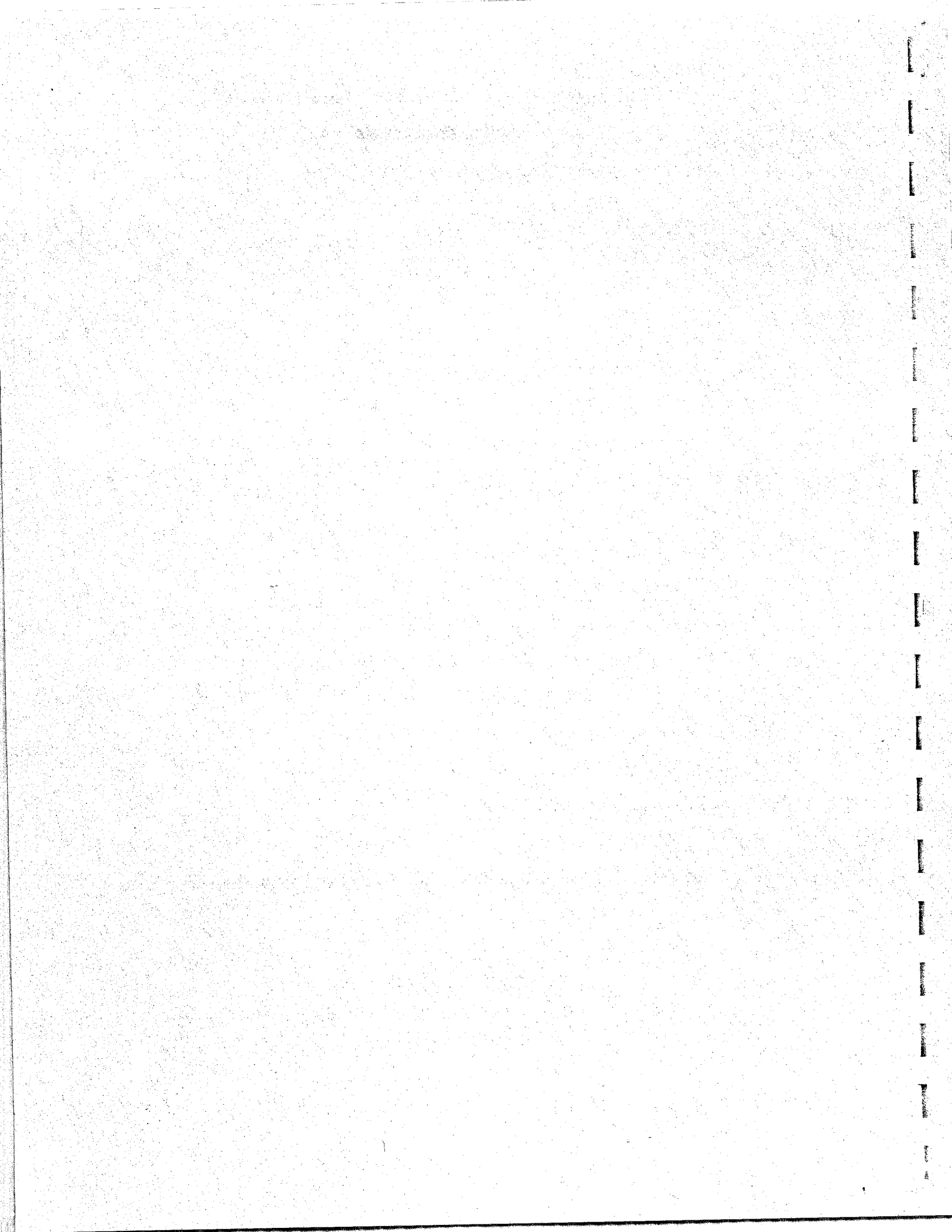
NEW YORK, NEW YORK 10017 U.S.A.

CONTENTS

	<u>Page</u>
1. Member Companies and Representatives - 1971	1
2. Officers - 1971	4
3. Board of Directors - 1971	5
4. Executive Committee - 1971	7
5. ILZRO Staff	8
6. Lead Program Review Committee	9
7. Lead Chemical Committee	11
8. Lead Environmental Health Committee	13
9. Lead Metallurgical-Electrochemical Committee	16
10. Zinc Program Review Committee	19
11. Zinc Chemical Committee	21
12. Zinc Electrochemical Committee	23
13. Zinc Environmental Health Committee	26
14. Zinc Metallurgical Committee	28
15. Alphabetical Listing and Addresses of All ILZRO Personnel	31

ILZRO MEMBERSHIP DIRECTORY

JULY 1, 1971



MEMBER COMPANIES AND REPRESENTATIVES - 1971

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
A. G. des Altenbergs für Bergbau und Zinkhüttenbetrieb Postfach 227 43 Essen- Borbeck West Germany	Karl-Heinz Brader
American Metal Climax, Inc. 1270 Avenue of the Americas New York, New York 10020	Eugene V. Frawley
American Smelting and Refining Company 120 Broadway New York, New York 10005	Simon D. Strauss
The Anaconda Company 25 Broadway New York, New York	William J. Veenis
The Broken Hill Associated Smelters Proprietary Ltd. 95 Collins Street Melbourne, Victoria, Australia, 3000	Frank H. Osborn
The Bunker Hill Company Old National Bank Building Spokane, Washington 99201	Frank G. Woodruff
Cerro Corporation 300 Park Avenue New York, New York 10022	To be appointed
Cominco Ltd. 1199 West Pender Street Vancouver 1, British Columbia, Canada	Edward H. Gautschi
Compagnie Royale Asturienne des Mines 42, avenue Gabriel - VIII ^o Paris, France	Aime C. Pommerie
Electrolytic Zinc Company of Australasia Ltd. P.O. Box 856 K Melbourne, Victoria, Australia, 3001	A. John Payne

MEMBER COMPANIES AND REPRESENTATIVES - 1971

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
Hudson Bay Mining and Smelting Co., Ltd. P.O. Box 28 Toronto-Dominion Centre Toronto 1, Ontario, Canada	C. Osborne Buchanan
International Smelting & Refining Co. 25 Broadway New York, New York 10004	Charles E. Schwab
N. V. Kempensche Zinkmaatschappij Budel-Dorplein (Nord Barbant) The Netherlands	Rudolph van Nordheim
Metallurgie Hoboken-Overpelt S.A. Fabriekstraat 144 B-3583 OVERPELT (Belgium)	Albert Quintin
Mitsubishi Metal Mining Co., Ltd. 5-2 Ohte-machi 1-Chome, Chiyoda-Ku Tokyo, Japan	Mitsuo Aikyo
Mitsui Mining & Smelting Co., Ltd. 2-Chome Nihonbashi-Muromachi, Chuo-Ku Tokyo, Japan	Shimpei Omoto
Mount Isa Mines Limited 99 Elizabeth Street Sydney, N.S.W., Australia, 2000	John W. Morgan
National Zinc Company, Inc. 919 Third Avenue New York, New York 10022	Frederick R. Jeffrey
The New Jersey Zinc Company 2045 City Line Road Bethlehem, Pennsylvania 18017	James R. Alexander
Noranda Sales Corporation Ltd. 44 King Street West Toronto 1, Ontario, Canada	R. Gordon Driver
Det Norske Zinkkompani A/S Drammensveien 30 OSLO 2, Norway	Cato Rachlew

MEMBER COMPANIES AND REPRESENTATIVES - 1971

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
Société Minière et Metallurgique de Peñarroya 1, Boulevard de Vaugirard 75 Paris-15e, France	Roger J. Testut
Société de Prayon S.A. Kue Joseph Wauters 144 B-4130 ENGIS (Belgium)	Gerard Delruelle
The Rio Tinto-Zinc Corporation Ltd. 6 St. James's Square London S.W. 1, England	R. J. Assheton
St. Joe Minerals Corporation 250 Park Avenue New York, New York 10017	Lawrason Riggs III
Sulphide Corporation Pty. Ltd. 95 Collins Street Melbourne, Victoria, Australia, 3000	James H. Standish
Texas Gulf Sulphur Company, Inc. 200 Park Avenue New York, New York 10017	John W. Hall, Jr.
Tsumeb Corporation Limited c/o Ametalco, Inc. 530 Fifth Avenue New York, New York 10036	John J. Lennon
United States Smelting Refining and Mining Company 235 East 42nd Street New York, New York 10017	J. George Gange
Société des Mines & Fonderies de Zinc de la Vieille-Montagne Direction Generale B - 4900 ANGLEUR (Belgium)	Albert F. H. Ghysens

ILZRO OFFICERS - 1971

(Elected November 9, 1970)

President

C. Osborne Buchanan
Hudson Bay Mining and Smelting Co., Ltd.

Executive Vice President and
Director of Research

Schrade F. Radtke
ILZRO Staff

Vice President

John J. Lennon
Tsumeb Corporation Limited

Vice President

James R. Alexander
The New Jersey Zinc Company

Treasurer

William J. Veenis
The Anaconda Company

Assistant Treasurer and
Manager of Administration

Mrs. Margaret J. Carpenter
ILZRO Staff

Secretary and Manager,
Chemistry & Patents

Dodd S. Carr
ILZRO Staff

BOARD OF DIRECTORS - 1971

MEMBER

DIRECTOR

A.G. des Altenbergs für Bergbau und Zinkhüttenbetrieb	Karl-Heinz Brader
American Metal Climax, Inc.	Eugene V. Frawley
American Smelting and Refining Company	Simon D. Strauss
The Anaconda Company	William J. Veenis
The Broken Hill Associated Smelters Pty. Ltd.	Frank H. Osborn
The Bunker Hill Company	Frank G. Woodruff
Cerro Corporation	To be appointed
Cominco Ltd.	Edward H. Gautschi
Compagnie Royale Asturienne des Mines	Aime C. Pommerie
Electrolytic Zinc Company of Australasia Ltd.	A. John Payne
Hudson Bay Mining and Smelting Co., Ltd.	C. Osborne Buchanan
International Smelting & Refining Co.	Charles E. Schwab
N.V. Kempensche Zinkmaatschappij	Rudolph van Nordheim
Metallurgie Hoboken-Overpelt S.A.	Albert Quintin
Mitsubishi Metal Mining Co., Ltd.	Mitsuo Aikyo
Mitsui Mining & Smelting Co., Ltd.	Shimpei Omoto
Mount Isa Mines Limited	John W. Morgan
National Zinc Company, Inc.	Frederick R. Jeffrey
The New Jersey Zinc Company	James R. Alexander
Noranda Sales Corporation Ltd.	R. Gordon Driver
Det Norske Zinkkompani A/S	Cato Rachlew

BOARD OF DIRECTORS - 1971

MEMBER

Société Minière et Metallurgique de
Peñarroya

Société de Prayon S.A.

The Rio Tinto-Zinc Corporation Ltd.

St. Joe Minerals Corporation

Sulphide Corporation Pty. Ltd.

Texas Gulf Sulphur Company, Inc.

Tsumeb Corporation Limited

United States Smelting Refining and Mining
Company

Société des Mines & Fonderies de Zinc de la
Vieille-Montagne

DIRECTOR

Roger J. Testut

Gerard Delruelle

To be appointed

Lawrason Riggs III

James H. Standish

John W. Hall, Jr.

John J. Lennon

Jack Wilder

Albert F.H. Ghysens

ILZRO EXECUTIVE COMMITTEE - 1971

James R. Alexander

Vice President
The New Jersey Zinc Company

C. Osborne Buchanan*

Vice President - Sales
Hudson Bay Mining and Smelting Co., Ltd.

Albert F. H. Ghysens

Corporate Technical Manager
Société des Mines & Fonderies de Zinc
de la Vieille-Montagne

John J. Lennon

President
Ametalco, Inc.

Shimpei Omoto

President
Mitsui Mining & Smelting Co., Ltd.

A. John Payne **

General Manager, Marketing Division
Electrolytic Zinc Company of Australasia,
Limited

James H. Standish

Chairman
Sulphide Corporation Pty. Ltd.

* Chairman - Executive Committee

** To fill unexpired term of Max I. Freeman, retired.

ILZRO STAFF

Schrade F. Radtke
Executive Vice President, Director of Research

Kenneth J. Altorfer

Manager, Development

Mrs. Margaret J. Carpenter

Manager, Administration and
Assistant Treasurer

Dodd S. Carr

Manager, Chemistry & Patents and
Corporate Secretary

Jerome F. Cole

Manager, Environmental Health

Albert F. Cook

Manager, Electrochemistry

Donald C. Herrschaft

Manager, Metallurgy

Donald R. Lynam

Assistant Manager, Environmental Health

Adolph L. Ponikvar

Manager, Technical Publications

Eustace Reid

Manager, Library Services

LEAD PROGRAM REVIEW COMMITTEE - 1971

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
A. G. des Altenbergs für Bergbau und Zinkhüttenbetrieb	To be appointed
American Metal Climax, Inc.	E. V. Frawley
American Smelting and Refining Company	To be appointed
The Anaconda Company	C. F. De Armond (Chairman)
The Broken Hill Associated Smelters Pty. Ltd.	F. H. Osborn
The Bunker Hill Company	A. H. Larson
Cerro Corporation	I. L. Barker
Cominco Ltd.	J. R. Wellington
Compagnie Royale Asturienne des Mines	J. Sitges
International Smelting and Refining Co.	To be appointed
Metallurgie Hoboken-Overpelt S.A.	R. Nicaise
Mitsubishi Metal Mining Co., Ltd.	N. Ichida
Mitsui Mining & Smelting Co., Ltd.	J. Wada
Mount Isa Mines Limited	K. R. Barrett
Société Minière et Metallurgique de Peñarroya	R. J. Testut (Vice Chairman)
St. Joe Minerals Corporation	M. Bonyng
Tsumeb Corporation Limited	L. L. Cogen
United States Smelting Refining and Mining Company	F. L. Warner
Société des Mines & Fonderies de Zinc de la Vieille-Montagne	A.F.H. Ghysens

LEAD PROGRAM REVIEW COMMITTEE - 1971

CARBON COPY RECIPIENTS

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
Mitsubishi Metal Mining Co., Ltd.	H. Sakurai
Mitsui Mining & Smelting Co., Ltd.	H. Tachimori
C. Tennant Sons & Company	W. C. Zeek

COMMITTEE SECRETARY

ILZRO Staff Member	K.J. Altorfer
--------------------	---------------

LEAD CHEMICAL COMMITTEE - 1971

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
A.G. des Altenbergs für Bergbau und Zinkhüttenbetrieb	To be appointed
American Metal Climax, Inc.	R. G. Ernst
American Smelting and Refining Company	M. L. Hollander
The Anaconda Company	To be appointed
The Broken Hill Associated Smelters Pty. Ltd.	B. R. Dohnt
The Bunker Hill Company	A. H. Larson
Cerro Corporation	To be appointed
Cominco Ltd.	M. M. Wright (Chairman)
Compagnie Royale Asturienne des Mines	V. Rodriguez Pena
International Smelting & Refining Co.	To be appointed
Metallurgie Hoboken-Overpelt S.A.	P. Forton
Mitsubishi Metal Mining Co., Ltd.	I. Ichida
Mitsui Mining & Smelting Co., Ltd.	J. Wada
Mount Isa Mines Limited	J. W. Morgan
Société Minière et Metallurgique de Peñarroya	J. Darcey
St. Joe Minerals Corporation	G. A. Parker
Tsumeb Corporation Limited	L. L. Cogen
United States Smelting Refining and Mining Company	To be appointed
Société des Mines & Fonderies de Zinc de la Vieille-Montagne	G. Sempels

LEAD CHEMICAL COMMITTEE - 1971

ASSOCIATE MEMBERS

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
Centre D'Information De Plomb	J. C. Chauvin
E. I. du Pont de Nemours & Company, Inc.	J. D. Sterling
Ethyl Corporation	A. P. Giraitis
Hammond Lead Products, Inc.	J. S. Nordyke
Lead Development Association	S. A. Hiscock
Rutgers, The State University	M. G. McLaren

CARBON COPY RECIPIENTS

Mitsubishi Metal Mining Co., Ltd.	H. Sakurai (Vice Chairman)
Mitsui Mining & Smelting Co., Ltd.	H. Tachimori
C. Tennant Sons & Company	W. C. Zeek

COMMITTEE SECRETARY

ILZRO Staff Member	D. S. Carr
--------------------	------------

LEAD ENVIRONMENTAL HEALTH COMMITTEE - 1971

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
A. G. des Altenbergs für Bergbau und Zinkhüttenbetrieb	To be appointed
American Metal Climax, Inc.	To be appointed
American Smelting and Refining Company	K. W. Nelson
The Anaconda Company	To be appointed
The Broken Hill Associated Smelters Pty. Ltd.	H. M. Johnson
The Bunker Hill Company	A. H. Larson
Cerro Corporation	I. L. Barker
Cominco Ltd.	R. C. Bell (Chairman)
Compagnie Royale Asturienne des Mines	J. Verdejo
International Smelting & Refining Co.	To be appointed
Metallurgie Hoboken-Overpelt S.A.	P. Forton
Mitsubishi Metal Mining Co., Ltd.	N. Ichida
Mitsui Mining & Smelting Co., Ltd.	J. Wada
Mount Isa Mines Limited	K. R. Barrett
Société Minière et Metallurgique de Peñarroya	J. Meininger
St. Joe Minerals Corporation	J. G. Sevick
Tsumeb Corporation Limited	L. L. Cogen
United States Smelting Refining and Mining Company	F. L. Warner
Société des Mines & Fonderies de Zinc de la Vieille-Montagne	G. Sempels

LEAD ENVIRONMENTAL HEALTH COMMITTEE - 1971

CONTRIBUTING MEMBERS

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
The Associated Octel Company, Limited	P.S.I. Barry and E. J. Gay
E.I. du Pont de Nemours & Company, Inc.	D. R. Diggs
Ethyl Corporation	H. E. Hesselberg
Houston Chemical Corporation	R. Sugimoto
Nalco Chemical Company	J. C. Calandra

ASSOCIATE MEMBERS

Centre D'Information Du Plomb	J. C. Chauvin
ESB Incorporated	W. M. Pallies
Gould National Battery Corporation	F. Slomba
Hammond Lead Products, Inc.	J. S. Nordyke
Japan Lead Zinc Development Association	S. Tokunaga
Lead Development Association	S. A. Hiscock
Lead Industries Association, Inc.	D. M. Borcina

CARBON COPY RECIPIENTS

American Metal Climax, Inc.	R. G. Ernst
Cominco Ltd.	H. W. Bayley, L. J. Nicholson, and J. R. Wellington

LEAD ENVIRONMENTAL HEALTH COMMITTEE - 1971

CARBON COPY RECIPIENTS

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
Ethyl Corporation	A. S. Hawkes, W. E. Rinehart, and G. Roush, Jr.
Hill & Knowlton, Inc.	C. Thompson
Houston Chemical Corporation	O. Fremd
Mitsubishi Metal Mining Company, Ltd.	H. Sakurai
Mitsui Mining and Smelting Company, Ltd.	H. Tachimori
Société Minière et Metallurgique de Peñarroya	J. Darcey
St. Joe Minerals Corporation	R. Kubalak and D. H. Beilstein
C. Tennant Sons & Company	W. C. Zeek

COMMITTEE SECRETARY

ILZRO Staff Member	J. F. Cole
--------------------	------------

LEAD METALLURGICAL-ELECTROCHEMICAL COMMITTEE - 1971

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
A. G. des Altenbergs für Bergbau und Zinkhüttenbetrieb	To be appointed
American Metal Climax, Inc.	R. G. Ernst (Chairman)
American Smelting and Refining Company	B. Fader
The Anaconda Company	To be appointed
The Broken Hill Associated Smelters Pty. Ltd.	R. D. Semmens
The Bunker Hill Company	A. H. Larson
Cerro Corporation	I. L. Barker
Cominco Ltd.	M. M. Wright
Compagnie Royale Asturienne des Mines	V. Rodriguez Pena
International Smelting & Refining Co.	To be appointed
Metallurgie Hoboken-Overpelt S.A.	P. Forton
Mitsubishi Metal Mining Co., Ltd.	N. Ichida
Mitsui Mining & Smelting Co., Ltd.	J. Wada
Mount Isa Mines Limited	J. W. Morgan
Société Minière et Metallurgique de Peñarroya	J. Darcey (Vice Chairman)
St. Joe Minerals Corporation	M. V. Rose
Tsumeb Corporation Limited	L. L. Cogen
United States Smelting Refining and Mining Company	F. L. Warner
Société des Mines & Fonderies de Zinc de la Vieille-Montagne	G. Ries

LEAD METALLURGICAL-ELECTROCHEMICAL COMMITTEE - 1971

ASSOCIATE MEMBERS

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
Bell Telephone Laboratories, Inc.	J. H. Scaff
Centre D'Information du Plomb	J. C. Chauvin
ESB Incorporated	A. J. Salkind
ESB Incorporated	J. R. Smyth
Ford Motor Company	R. L. Bennett
General Battery and Ceramic Corp.	H. R. Karas
General Motors Corporation	B. Agruss
General Tire International Company	W. R. Johnson
Globe Union, Inc.	E. Y. Weissman
Gould, Inc.	A. Sabatino
Lead Development Association	S. A. Hiscock
Lead Industries Association, Inc.	D. M. Borcina
McGraw Edison Power Company	P. G. Grimes
N L Industries, Inc.	J. M. Nees
Department of the Navy	R. Schmidt
Newmont Mining Corporation	D. J. Christie

CARBON COPY RECIPIENTS

Mitsubishi Metal Mining Company, Ltd.	H. Sakurai
Mitsui Mining & Smelting Company, Ltd.	H. Tachimori
C. Tennant Sons & Company	W. C. Zeek

LEAD METALLURGICAL-ELECTROCHEMICAL COMMITTEE

COMMITTEE SECRETARY

ILZRO Staff Members

A. R. Cook and
D. C. Herrschaft

ZINC PROGRAM REVIEW COMMITTEE - 1971

MEMBER

REPRESENTATIVE

A. G. des Altenbergs für Bergbau und Zinkhüttenbetrieb	To be appointed
American Metal Climax, Inc.	E. V. Frawley
American Smelting and Refining Company	To be appointed
The Anaconda Company	B. L. Meredith
The Broken Hill Associated Smelters Pty. Ltd.	F. H. Osborn
The Bunker Hill Company	A. H. Larson
Cerro Corporation	I. L. Barker
Cominco Ltd.	J. R. Wellington
Compagnie Royale Asturienne des Mines	A. C. Pommerie
Electrolytic Zinc Company of Australasia Limited	C. J. Hamdorf
Hudson Bay Mining and Smelting Co., Ltd.	J. D. Purvis
N. V. Kempensche Zinkmaatschappij	G. van Monsjou
Metallurgie Hoboken-Overpelt S.A.	R. Nicaise
Mitsubishi Metal Mining Co., Ltd.	N. Ichida
Mitsui Mining & Smelting Co., Ltd.	J. Wada
National Zinc Company, Inc.	P. Gittelson
The New Jersey Zinc Company	R. W. Rosenquest (Chairman)
Noranda Sales Corporation Ltd.	K. C. Hendrick (Vice Chairman)
Det Norske Zinkkompani A/S	K. Stavnsborg
Société Minière et Metallurgique de Peñarroya	R. J. Testut
Société de Prayon S.A.	To be appointed

ZINC PROGRAM REVIEW COMMITTEE -- 1971

MEMBER

REPRESENTATIVE

The Rio Tinto-Zinc Corporation Ltd.

A. K. Barbour

St. Joe Minerals Corporation

C. C. Long

Sulphide Corporation Pty. Ltd.

P. R. Mead

Texas Gulf Sulphur Company, Inc.

H. Hoffman

United States Smelting Refining and Mining Company

F. L. Warner

Société des Mines & Fonderies de Zinc de la Vieille-Montagne

A.F.H. Ghysens

CARBON COPY RECIPIENTS

Hudson Bay Mining and Smelting Co., Ltd.

C. Osborne Buchanan

Mitsubishi Metal Mining Co., Ltd.

H. Sakurai

Mitsui Mining & Smelting Co., Ltd.

H. Tachimori

C. Tennant Sons & Company

W. C. Zeek

COMMITTEE SECRETARY

ILZRO Staff Member

K. J. Altorfer

ZINC CHEMICAL COMMITTEE - 1971

MEMBER

REPRESENTATIVE

A.G. des Altenbergs für Bergbau und Zinkhüttenbetrieb	To be appointed
American Metal Climax, Inc.	J. A. Anderson
American Smelting and Refining Company	M. L. Hollander (Vice Chairman)
The Anaconda Company	To be appointed
The Broken Hill Associated Smelters Pty. Ltd.	B. R. Dohnt
The Bunker Hill Company	R. L. Bird
Cerro Corporation	To be appointed
Cominco Ltd.	M. M. Wright
Compagnie Royale Asturienne des Mines	N. Dreulle
Electrolytic Zinc Company of Australasia Ltd.	C. J. Hamdorf
Hudson Bay Mining and Smelting Company, Ltd.	To be appointed
N. V. Kempensche Zinkmaatschappij	C. Dor
Metallurgie Hoboken-Overpelt S.A.	P. Forton
Mitsubishi Metal Mining Company, Ltd.	N. Ichida
Mitsui Mining & Smelting Co., Ltd.	J. Wada
National Zinc Company, Inc.	T. L. Vogt
The New Jersey Zinc Company	F. S. Griffith
Noranda Sales Corporation	To be appointed
Det Norske Zinkkompani A/S	G. Steintveit
Société Minière et Metallurgique de Peñarroya	J. Darcey
Société de Prayon S.A.	To be appointed

ZINC CHEMICAL COMMITTEE - 1971

MEMBER

REPRESENTATIVE

The Rio Tinto-Zinc Corporation Ltd.

D. S. Newton

St. Joe Minerals Corporation

R. S. Bowman

Sulphide Corporation Pty. Ltd.

P. R. Mead

Texas Gulf Sulphur Company, Inc.

R.J.C. Tait

United States Smelting Refining and
Mining Company

To be appointed

Société des Mines & Fonderies de Zinc
de la Vieille-Montagne

G. Sempels (Chairman)

ASSOCIATE MEMBERS

Le Centre Technique du Zinc

C. A. Wahl

McGraw-Edison Power Company

P. G. Grimes

Rutgers, The State University

M. G. McLaren

Scandinavian Lead Zinc Association

M. Blomkuist

Zinc Development Association

A.R.L. Chivers

Zinc Institute, Inc.

D. W. Pettigrew

CARBON COPY RECIPIENTS

Mitsubishi Metal Mining Co., Ltd.

H. Sakurai

Mitsui Mining & Smelting Co., Ltd.

H. Tachimori

Noranda Sales Corporation Ltd.

N. R. Bharucha

C. Tennant Sons & Company

W. C. Zeek

COMMITTEE SECRETARY

ILZRO Staff Member

D. S. Carr

ZINC ELECTROCHEMICAL COMMITTEE - 1971

MEMBER

REPRESENTATIVE

A. G. des Altenbergs für Bergbau und Zinkhüttenbetrieb

To be appointed

American Metal Climax, Inc.

R. G. Ernst

American Smelting and Refining Company

D. Pearce

The Anaconda Company

C. F. DeArmond

The Broken Hill Associated Smelters Pty. Ltd.

R. D. Semmens

The Bunker Hill Company

R. L. Bird

Cerro Corporation

To be appointed

Cominco Ltd.

H. Guttman

Compagnie Royale Asturienne des Mines

R. Dreulle (Mrs.)

Electrolytic Zinc Company of Australasia Limited

C. J. Hamdorf

Hudson Bay Mining and Smelting Co., Ltd.

To be appointed

N. V. Kempensche Zinkmaatschappij

C. Dor

Metallurgie Hoboken-Overpelt S.A.

P. Forton

Mitsubishi Metal Mining Co., Ltd.

N. Ichida

Mitsui Mining and Smelting Co., Ltd.

J. Wada

National Zinc Company, Inc.

T. L. Vogt

The New Jersey Zinc Company

C. B. Tennant

Noranda Sales Corporation

To be appointed

Det Norske Zinkkompani A/S

G. Steintveit

ZINC ELECTROCHEMICAL COMMITTEE - 1971

MEMBER

REPRESENTATIVE

Société Minière et Metallurgique de Peñarroya
Société de Prayon S.A.
The Rio Tinto-Zinc Corporation Ltd.
St. Joe Minerals Corporation
Sulphide Corporation Pty. Ltd.
Texas Gulf Sulphur Company, Inc.
United States Smelting Refining and Mining Company
Société des Mines & Fonderies de Zinc de la Vieille-Montagne

J. Darcey
To be appointed
A. W. Richards
R. F. Dvorak
P. R. Mead
R.J.C. Tait (Vice Chairman)
To be appointed
T. Pitance

ASSOCIATE MEMBERS

Armco Research Center
Le Centre Technique du Zinc
Die Casting Research Foundation
Doehler-Jarvis-Division (N L Industries)
E. I. du Pont de Nemours & Co., Inc.
Enthone Incorporated
The Every Ready Company (Great Britain) Ltd.
McGraw Edison Power Company
N L Industries, Inc.
Scandanavian Lead Zinc Association
Sheller Globe Corporation
Stichting Doelmatig Verzinken
Zinc Development Association

K. Oganowski
C. A. Wahl
R. C. Cornell
R. P. Dunn
J. E. McNutt
E. B. Saubestre
F. L. Tye
P. G. Grimes
J. M. Nees
M. Blomkuist
B. K. Dent
J.F.H. van Eijnsbergen
A.R.L. Chivers

ZINC ELECTROCHEMICAL COMMITTEE - 1971

ASSOCIATE MEMBERS

MEMBERS

Zinc Institute, Inc.

Zinc Institute, Inc.

REPRESENTATIVES

D. W. Pettigrew

J. E. Zane

CARBON COPY RECIPIENTS

American Die Casting Institute

Coulter Manufacturing Limited

General Smelting Company of Canada Ltd.

Mitsubishi Metal Mining Company, Ltd.

Mitsui Mining & Smelting Co., Ltd.

Noranda Sales Corporation Ltd.

C. Tennant Sons & Company

D. Laine

H. D. Percy

O. A. Davies

H. Sakurai

H. Tachimori

J. N. Anderson

W. C. Zeek

COMMITTEE SECRETARY

ILZRO Staff Member

A. R. Cook

ZINC ENVIRONMENTAL HEALTH COMMITTEE - 1971

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
A.G. des Altenbergs für Bergbau und Zinkhüttenbetrieb	To be appointed
American Metal Climax, Inc.	To be appointed
American Smelting and Refining Company	K. W. Nelson
The Anaconda Company	G. W. Wunder
The Broken Hill Associated Smelters Pty. Ltd.	H. M. Johnson
The Bunker Hill Company	W. E. Kenyon
Cerro Corporation	To be appointed
Cominco Ltd.	L. J. Nicholson
Compagnie Royale Asturienne des Mines	To be appointed
Electrolytic Zinc Company of Australasia Ltd.	C. J. Hamdorf
Hudson Bay Mining and Smelting Company, Ltd.	To be appointed
N. V. Kempensche Zinkmaatschappij	C. Dor
Metallurgie Hoboken-Overpelt S.A.	P. Forton
Mitsubishi Metal Mining Co., Ltd.	N. Ichida
Mitsui Mining & Smelting Co., Ltd.	J. Wada
National Zinc Company, Inc.	V. O. Haldane
The New Jersey Zinc Company	J. F. Smith
Noranda Sales Corporation Ltd.	To be appointed
Det Norske Zinkkompani A/S	To be appointed
Société Minière et Metallurgique de Peñarroya	To be appointed
Société de Prayon S.A.	To be appointed

ZINC ENVIRONMENTAL HEALTH COMMITTEE - 1971

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
The Rio Tinto-Zinc Corporation Ltd.	To be appointed
St. Joe Minerals Corporation	To be appointed
Sulphide Corporation Pty. Ltd.	To be appointed
Texas Gulf Sulphur Company, Inc.	To be appointed
United States Smelting Refining and Mining Company	To be appointed
Société des Mines & Fonderies de Zinc de la Vieille-Montagne	G. Sempels

ASSOCIATE MEMBERS

Le Centre Technique du Zinc	C. A. Wahl
Hammond Lead Products, Inc.	J. S. Nordyke
Japan Lead Zinc Development Association	S. Tokunaga

CARBON COPY RECIPIENTS

Blackwell Zinc Company	J. E. Gorman
Cominco Ltd.	H. W. Bayley
Great Falls Reduction Works (Anaconda)	W. J. Roberts
Mitsubishi Metal Mining Co., Ltd.	H. Sakurai
Mitsui Mining & Smelting Co., Ltd.	H. Tachimori
The Rio Tinto-Zinc Corporation Ltd.	A. K. Barbour
C. Tennant Sons & Company	W. C. Zeek

COMMITTEE SECRETARY

ILZRO Staff Member

J. F. Cole

ZINC METALLURGICAL COMMITTEE - 1971

MEMBER

REPRESENTATIVE

A. G. des Altenbergs für Bergbau und
Zinkhüttenbetrieb

American Metal Climax, Inc.

American Smelting and Refining Company

The Anaconda Company

The Broken Hill Associated Smelters
Pty. Ltd.

The Bunker Hill Company

Cerro Corporation

Cominco Ltd.

Compagnie Royale Asturienne des Mines

Electrolytic Zinc Company of Australasia Ltd.

Hudson Bay Mining and Smelting Co., Ltd.

N. V. Kempensche Zinkmaatschappij

Metallurgie Hoboken-Overpelt S.A.

Mitsubishi Metal Mining Co., Ltd.

Mitsui Mining & Smelting Co., Ltd.

National Zinc Company, Inc.

The New Jersey Zinc Company

Noranda Sales Corporation Ltd.

Det Norske Zinkkompani A/S

Société Minière et Metallurgique de
Peñarroya

To be appointed

J. F. Pierce

A. W. Blackwood

B. L. Meredith (Vice Chairman)

R. D. Semmens

R. L. Bird

I. L. Barker

T. W. Watson

N. Dreulle

C. J. Hamdorf

To be appointed

C. Dor (Chairman)

P. Forton

N. Ichida

J. Wada

T. L. Vogt

C. B. Tennant

P. Chollet

G. Steintveit

J. Darcey

ZINC METALLURGICAL COMMITTEE - 1971

<u>MEMBER</u>	<u>REPRESENTATIVE</u>
Société de Prayon S.A.	To be appointed
The Rio Tinto-Zinc Corporation Ltd.	A. W. Richards
St. Joe Minerals Corporation	J. M. Cigan
Sulphide Corporation Pty. Ltd.	P. R. Mead
Texas Gulf Sulphur Company, Inc.	R.J.C. Tait
United States Smelting Refining and Mining Company	F. L. Warner
Société des Mines & Fonderies de Zinc de la Vieille-Montagne	J. Bellier

ASSOCIATE MEMBERS

American Die Casting Institute	D. Laine
Armco Research Center	K. Oganowski
Ball Corporation	R. A. Kibler
Le Centre Technique du Zinc	C. A. Wahl
Die Casting Research Foundation	R. C. Cornell
McGraw Edison Power Company	P. G. Grimes
N L Industries, Inc.	E. N. Aqua
Newmont Mining Corporation	D. J. Christie
Scandanavian Lead Zinc Association	M. Blomkuist
Sheller Globe Corporation	B. K. Dent
Stichting Doelmatig Verzinken	J.F.H. van Eijnsbergen
Zinc Development Association	A.R.L. Chivers
Zinc Institute, Inc.	D. W. Pettigrew

ZINC METALLURGICAL COMMITTEE - 1971

MEMBERSHIP

CARBON COPY RECIPIENTS

MEMBER

REPRESENTATIVE

Coulter Manufacturing Ltd.
General Smelting Company of Canada Ltd.
Mitsubishi Metal Mining Co., Ltd.
Mitsui Mining & Smelting Co., Ltd.
St. Joe Minerals Corporation
C. Tennant Sons & Company

H. D. Percy
O. A. Davies
H. Sakurai
H. Tachimori
R. G. Konecny
W. C. Zeek

COMMITTEE SECRETARY

ILZRO Staff Member

D. C. Herrschaft

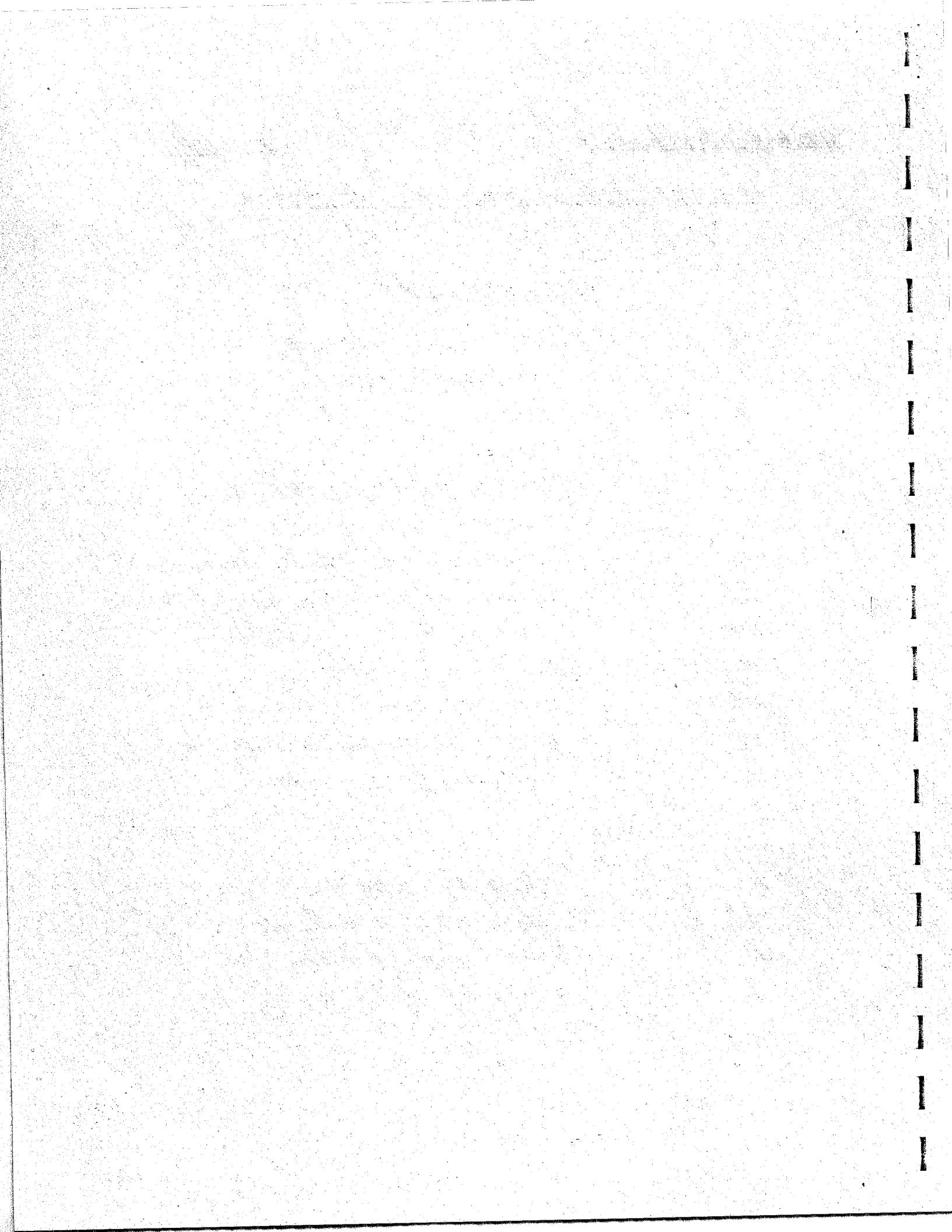
ALPHABETICAL LISTING AND ADDRESSES OF ALL ILZRO PERSONNEL

LIST OF ABBREVIATIONS

- MEM. REP. - Member Company Representative
- BD. DIR. - ILZRO Board of Directors
- EXEC. COMM. - ILZRO Executive Committee
- STAFF - ILZRO Staff
- LPRC - ILZRO Lead Program Review Committee
- LCC - ILZRO Lead Chemical Committee
- LEHC - ILZRO Lead Environmental Health Committee
- LMEC - ILZRO Lead Metallurgical-Electrochemical Committee
- ZPRC - ILZRO Zinc Program Review Committee
- ZCC - ILZRO Zinc Chemical Committee
- ZEC - ILZRO Zinc Electrochemical Committee
- ZEHC - ILZRO Zinc Environmental Health Committee
- ZMC - ILZRO Zinc Metallurgical Committee

.....

- M - Member of Board or Committee
- S - Secretary of Board or Committee
- AM - Associate Member of Committee
- CC - Carbon Copy Recipient of Reports



NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Dr. B. Agruss Research Laboratories General Motors Corporation 12 Mile and Mound Roads Warren, Michigan 48090								AM					
Mitsuo Aikyo President Mitsubishi Metal Mining Co., Ltd. 5-2 Ohte-machi 1-Chome, Chiyoda-ku Tokyo, Japan	M	M											
James R. Alexander Vice President The New Jersey Zinc Company 2045 City Line Road Bethlehem, Pennsylvania 18017	M	M	M										
Kenneth J. Altorfer ILZRO 292 Madison Avenue New York, New York 10017									S				
J.A. Anderson Blackwell Zinc Company, Inc. Blackwell, Oklahoma 74631													
J.N. Anderson Noranda Mines Limited 44 King Street West Toronto 1, Ontario, Canada													M

NAME AND ADDRESS	Administrative			Lead Committee				Zinc Committee					
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEG	ZPRC	ZCC	ZEC	ZEHC	ZMC
Dr. E. N. Aqua N L Industries, Inc. Central Research Laboratory Hightstown, New Jersey 08520													
R. J. Assheton The Rio Tinto-Zinc Corp. Ltd. 6 St. James's Square London S.W. 1, England	M												
Dr. A. K. Barbour Imperial Smelting Corp. Ltd. Avonmouth Bristol BS 11 9HP England					M		M		M				M
I. L. Barker Cerro Corporation 300 Park Avenue New York, New York 10022					M		M						
K. R. Barrett Mount Isa Mines Ltd. Britannia Lead Co. Ltd. Northfleet, Gravesend, Kent England													
Dr. P.S.I. Barry The Associated Octel Company, Ltd Ellesmere Port Cheshire, England							M						
H. W. Bayley Cominco Ltd. 1199 West Pender Street Vancouver 1, B.C., Canada							CC					CC	

NAME AND ADDRESS	Administrative			Lead Committee				Zinc Committee					
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IIRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
D. H. Beilstein St. Joe Minerals Corporation Herculanum, Missouri							CC						
R. C. Bell Cominco Ltd. Trail, British Columbia Canada						M							
J. Bellier Societe des Mines & Fonderies de Zinc de la Vieille-Montagne Direction de Paris 19 Rue Richer Paris 9eme, France													M
R. L. Bennett Manager, Battery Engineering Dept. Ford Motor Company 21500 Oakwood Blvd. Dearborn, Michigan 48121									AM				
Dr. N. R. Bharucha Noranda Research Centre 240 Hymus Blvd. Pointe Claire, Quebec, Canada										CC			
Robert L. Bird The Bunker Hill Company P.O. Box 29 Kellogg, Idaho 83837											M		M

NAME AND ADDRESS	Administrative			Lead Committee			Zinc Committee						
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IFRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Dr. A.W. Blackwood American Smelting and Refining Co. Central Research Laboratories South Plainfield, New Jersey 07080													M
Magnus Blomkuist Scandinavian Lead Zinc Assoc. Boliden Aktiebolag Stockholm, Sweden										AM	AM		AM
M. Bonyne St. Joe Minerals Corporation 250 Park Avenue New York, New York 10017					M								
D.M. Borcina Lead Industries Association, Inc. 292 Madison Avenue New York, New York 10017							AM						
Dr. R.S. Bowman Mellon Institute 4400 Fifth Avenue Pittsburgh, Pennsylvania 15213										M			
Karl-Heinz Brader Technical Manager A.G. des Altenbergs fur Bergbau und Zinkhutenbetrieb Postfach 227 43 Essen-Borbeck West Germany	M												

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REF.	BD. DIR.	EXEC. COMM.	STAFF	IAPC	ICG	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
C. Osborne Buchanan Vice President - Sales Hudson Bay Mining and Smelting Co., Ltd. P.O. Box 28 Toronto-Dominion Centre Toronto 111, Ontario, Canada	M	M	M						CC				
Dr. J. C. Calandra Nalco Chemical Company c/o Industrial Bio-Test Laboratories, Inc. 1810 Frontage Road Northbrook, Illinois 60062							M						
Margaret J. Carpenter ILZRO 292 Madison Avenue New York, New York 10017				M									
Dr. Dodd S. Carr ILZRO 292 Madison Avenue New York, New York 10017	S	S	S	M		S				S			
J. Chauvin Centre D'Information du Plomb 1, Boulevard de Vaugirard Paris 15 ^e , France						AM	AM	AM					

NAME AND ADDRESS	Administrative			Lead Committee				Zinc Committee					
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHG	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
A.R.L. Chivers Zinc Development Association 34 Berkeley Square London W1., England										AM	AM		AM
Dr. P. Chollet Noranda Research Centre 240 Hymus Boulevard Pointe Claire, Quebec, Canada													M
D. J. Christie Newmont Mining Corporation 300 Park Avenue New York, New York 10022								AM					AM
Dr. J. M. Gigan St. Joe Minerals Corporation Zinc Smelting Division Monaca, Pennsylvania 15061													M
L. L. Cogen Ametalco, Inc. 530 Fifth Avenue New York, New York 10036					M	M	M						
Dr. J. F. Cole ILZRO 292 Madison Avenue New York, New York 10017				M			S					S	
A. R. Cook ILZRO 292 Madison Avenue New York, New York 10017				M				S					

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Robert C. Cornell Technical Director Die Casting Research Foundation Suite 11 3158 Des Plaines Road Des Plaines, Illinois 60018													
Joel Darcey Societe Miniere et Metallurgique de Penarroya 1 Boulevard de Vaugirard 75 Paris 15e, France						M	CC	M		M			M
O. A. Davies General Smelting Company of Canada Ltd. 834 Appleby Line P.O. Box 5031 Burlington, Ontario, Canada													CC
C. F. DeArmond The Anaconda Company 25 Broadway New York, New York 10004					M								M
Gerard Delrueille Ingenieur Conseil-Directeur Societe de Prayon S.A. Rue Joseph Wauters 144 B-4130 Engis, Belgium	M	M											

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	I P R C	I C C	L E H C	L M E C	Z P R C	Z C C	Z E C	Z E H C	Z M C
B. K. Dent Hardy Division Sheller Globe Corporation P.O. Box 109 Union City, Indiana 47390											AM		ZMC
D. R. Diggs Organic Chemicals Department Petroleum Chemicals Division E.I. du Pont de Nemours & Co., Inc. 7451 Nemours Building Wilmington, Delaware 19898						M							
B. R. Dohnt The Broken Hill Associated Smelters Proprietary, Ltd. 95 Collins Street Melbourne C. 1, Australia						M							
Ir. C. Dor N. V. Kempensche Zinkmaatschappij Budel-Dorplein (N.Br.) The Netherlands										M			M
N. Dreulle Compagnie Royale Asturienne des Mines 59 Auby-les-Douai France													M
Mrs. R. Dreulle Compagnie Royale Asturienne des Mines 59 Auby-les-Douai, France											M		

NAME AND ADDRESS	Administrative			Lead Committee				Zinc Committee					
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IIRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
R. Gordon Driver President Noranda Sales Corporation Ltd. 44 King Street West Toronto 1, Ontario, Canada	M	M											
R. F. Dvorak St. Joe Minerals Corporation Zinc Smelting Division Monaca, Pennsylvania 15061										M			
J.F.H. van Eijnsbergen Stichting Doelmatig Verziken 4/3 Weissenbruchstraat 11 The Hague, Netherlands										AM			AM
R. G. Ernst AMAX Base Metals Technical Dept. Carteret, New Jersey 07008						M	CC	M			M		
B. Fader American Smelting and Refining Co. Central Research Laboratories South Plainfield, New Jersey 07080								M					
P. Forton Metallurgie Hoboken-Overpelt S.A. Fabriekstraat 144 B-3583 OVERPELT Belgium						M	M	M		M		M	M
O. Fremd Houston Chemical Corporation One Gateway Center Pittsburgh, Pennsylvania 15222							CC						

NAME AND ADDRESS	Administrative			Lead Committee				Zinc Committee					
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
E. V. Frawley Vice President and Director of Marketing AMAX Lead & Zinc, Inc. 1270 Avenue of the Americas New York, New York 10020	M	M	■		M				M				
J. George Gange, Sr. Senior Vice President United States Smelting Refining and Mining Company 235 East 42nd Street New York, New York 10017	M		■										
Edward H. Gautschi Director, Marketing Research and Development Cominco Ltd. 1199 West Pender Street Vancouver, B.C., Canada	M	M	■										
* Errol J. Gay Albert F. H. Ghysens Corporate Technical Manager Societe des Mines & Fonderies de Zinc de la Vieille-Montagne Direction Generale B-4900 ANGLEUR (Belgique)	M	M	M		M				M				
Dr. A. P. Giraitis Ethyl Corporation Box 341 Baton Rouge, Louisiana 70821								AM					

*Please turn to end of Directory for address.

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IAPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
P. Gittelsohn National Zinc Company, Inc. 11 Broadway New York, New York 10004									M				
J. E. Gorman Plant Manager Blackwell Zinc Company Blackwell, Oklahoma												CC	
F. S. Griffith The New Jersey Zinc Company Palmerton, Pennsylvania 18071										M			
Dr. P. G. Grimes McGraw Edison Power Company 2201 12th Avenue S. Milwaukee, Wisconsin 53172										AM			AM
H. Guttman Cominco Ltd. Sheridan Park Ontario, Canada												M	
V. O. Haldane Project Development Manager National Zinc Company, Inc. P.O. Box 579 Bartlesville, Oklahoma 74003													M

NAME AND ADDRESS	Administrative			Lead Committee				Zinc Committee					
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
John W. Hall, Jr. Vice President Texas Gulf Sulphur Company, Inc. 200 Park Avenue New York, New York 10017	M	M	M										
Dr. C. J. Hamdorf Electrolytic Zinc Company of Australasia Limited G.P.O. Box 377 D Hobart, Tasmania, 7001, Australia									M	M	M	M	M
Dr. A. S. Hawkes Ethyl, S.A. 1 Rue Paul Lauters Brussels, Belgium							CC						
K. C. Hendrick Noranda Sales Corporation, Ltd. 44 King Street West Toronto 1, Ontario, Canada									M				
Donald C. Herrschaft ILZRO 292 Madison Avenue New York, New York 10017				M									S
H. E. Hesselberg Ethyl Corporation 1600 West Eight Mile Road Ferndale, Michigan 48220												M	

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
S. A. Hiscock Lead Development Association 34 Berkeley Square London W1., England						AM	AM	AM					
K. Hoffman Texas Gulf Sulphur Co., Inc. Toronto Dominion Centre P.O. Box 150 Toronto 111, Ontario, Canada									M				
Dr. M. L. Hollander American Smelting and Refining Co Central Research Laboratories South Plainfield, New Jersey 07080						M				M			
N. Ichida Mitsubishi Metal Mining Co., Ltd. 5-2 Ohte-Machi 1-Chome, Chiyoda-Ku Tokyo, Japan													M
Frederick R. Jeffrey President National Zinc Company, Inc. 919 Third Avenue New York, New York 10022	M	M											
Dr. H. M. Johnson The Broken Hill Associated Smelters Proprietary Ltd. 95 Collins Street Melbourne, 3000 Australia												M	

NAME AND ADDRESS	Administrative			Lead Committee			Zinc Committee						
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
W. R. Johnson Manufacturing Division General Tire International Co. 1 General Street Akron, Ohio 44309								AM					
Howard R. Karas, V.P. Research and Engineering General Battery Corp. Box 1262 Reading, Pennsylvania 19603								AM					
W. E. Kenyon Safety Program Administrator The Bunker Hill Company P.O. Box 29 Kellogg, Idaho 83837												M	
R. A. Kibler Ball Corporation 1509 South Macedonia Avenue Muncie, Indiana 47302													AM
R. G. Konecny St. Joe Minerals Corporation Zinc Smelting Division Monaca, Pennsylvania 15061													CC

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEG	ZEHC	ZMC
R. Kubalak St. Joe Minerals Corporation Zinc Smelting Division P.O. Box 4 Monaca, Pennsylvania 15061							CC						
David Laine American Die Casting Institute 366 Madison Avenue New York, New York 10017										CC			AM
Dr. A. H. Larson The Bunker Hill Company P.O. Box 29 Kellogg, Idaho 83837					M	M	M	M	M				
John J. Lennon President Ametalco, Inc. 530 Fifth Avenue New York, New York 10036	M	M	M										
Dr. C. C. Long Zinc Smelting Division St. Joe Minerals Corporation Monaca, Pennsylvania 15061													M
Donald R. Lynam ILZRO 292 Madison Avenue New York, New York 10017				M									

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	ICG	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Professor M. G. McLaren School of Ceramics Rutgers, The State University University Heights New Brunswick, New Jersey 08903						AM				AM			
J. E. McNutt E.I. du Pont de Nemours & Co., Inc. Electrochemicals Department Chestnut Run Laboratory Wilmington, Delaware 19898											AM		
P. R. Mead Sulphide Corporation Pty. Ltd. Cockle Creek Works P.O. Box 42 Boolaroo, N.S.W., Australia									M	M	M		M
Dr. J. Meininger Societe Miniere et Metallurgique de Penarroya 1, Boulevard de Vaugirard 75 Paris, 15 France													
Bernard L. Meredith Anaconda Sales Company 25 Broadway New York, New York 10004									M				M

NAME AND ADDRESS	Administrative			Lead Committee				Zinc Committee					
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
G. van Monsjou N.V. Kempensche Zinkmaatschappij 65 Hoofdstraat Dorplein Post Budel The Netherlands									M				
John W. Morgan Sales Manager Mount Isa Mines Limited 99 Elizabeth Street Sydney, N.S.W., Australia, 2000	M	M	■			M		M					
J. Nees N L Industries, Inc. Central Research Laboratories Hightstown, New Jersey 08520								AM			AM		
K. W. Nelson American Smelting and Refining Co. 3422 South - 700 West Salt Lake City, Utah 84119							M						M
D. S. Newton Imperial Smelting Corporation (Alloys) Limited St. Andrews Road Avonmouth, Bristol BS11 9HP England										M			

NAME AND ADDRESS	Administrative			Lead Committee			Zinc Committee						
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	IMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Robert Nicaise Metallurgie Hoboken-Overpelt S.A. Fabriekstraat 144 B-3583 OVERPELT Belgium					M				M				
L. J. Nicholson Administrative Assistant Cominco Ltd. Trail, British Columbia, Canada							CC					M	
Rudolph van Nordheim Assistant Director N.V. Kempensche Zinkmaatschappij Budel-Dorplein (Nord Brabant) The Netherlands	M	M											
J. S. Nordyke Hammond Lead Products, Inc. 40 East Main Street Carnegie, Pennsylvania 15106						AM						AM	AM
K. Organowski Armco Research Center Middletown, Ohio 45042													
Shimpei Omoto President Mitsui Mining & Smelting Co., Ltd. 2-Chome Nihonbashi-Muromachi, Chuo-Ku Tokyo, Japan	M	M	M										

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	I _{PRC}	L _{CC}	LE _{HC}	L _{MEC}	Z _{PRC}	Z _{CC}	Z _{EC}	Z _{EHG}	Z _{MC}
Frank H. Osborn Manager - Marketing Division The Broken Hill Associated Smelters Proprietary, Ltd. 95 Collins Street Melbourne, Australia, 3000	M	M	M		M				M				ZMC
W. M. Pallies ESB INCORPORATED P.O. Box 8109 Philadelphia, Pennsylvania 19101							AM						
Dr. G. A. Parker Mellon Institute St. Joe Minerals Corporation 4400 Fifth Avenue Pittsburgh, Pennsylvania 15213					M	M							
A. John Payne General Manager-Marketing Division Electrolytic Zinc Company of Australasia Limited P.O. Box 856 K Melbourne, Australia, 3001	M	M	M										
Dr. D. Pearce American Smelting and Refining Co Central Research Laboratories South Plainfield, New Jersey 07080											M		CC

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IFRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
V. Rodriguez Pena Compagnie Royale Asturienne des Mines Real Compania Asturiana de Minas Apartado No 7, Aviles (Oviedo) Spain						M	M						
H. D. Percy Coulter Manufacturing Ltd. P.O. Box 190 Oshawa, Ontario, Canada										CC			CC
D. W. Pettigrew American Zinc Institute, Inc. 292 Madison Avenue New York, New York 10017										AM			AM
J. F. Pierce American Metal Climax, Inc. 1270 Avenue of the Americas New York, New York 10020													M
T. Pitance Societe des Mines & Fonderies de Zinc de la Vieille-Montagne Direction Generale B - 4900 ANGLEUR (Belgique)													

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IFRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Aime C. Pommerie Directeur Technique Compagnie Royale Asturienne des Mines 42, avenue Gabriel - VIII ^o Paris, France	M	M	■						M				
A. L. Ponikvar ILZRO 292 Madison Avenue New York, New York 10017				M									
J. D. Purvis Hudson Bay Mining and Smelting Co., Ltd. P.O. Box 28 Toronto-Dominion Centre Toronto 111, Ontario, Canada									M				
Albert Quintin Director General Manager Metallurgie Hoboken-Overpelt S.A. Fabriekstraat 144 B-3583 OVERPELT Belgium	M	M	■										
Cato Rachlew Managing Director Det Norske Zinkkompani A/S Drammensveien 30 OSLO 2, Norway	M	M	■										

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Dr. Schrade F. Radtke Executive Vice President and Director of Research ILZRO 292 Madison Avenue New York, New York 10017				M									
Eustace Reid ILZRO 292 Madison Avenue New York, New York 10017				M									
Dr. A. W. Richards Imperial Smelting Corporation Ltd. Avonmouth, Bristol, England										M			M
G. Ries Societe des Mines & Fonderies de Zinc de la Vieille-Montagne Direction Generale B - 4900 ANGLEUR (Belgique)													
Lawrason Riggs III Chairman of the Board and Chief Executive Officer St. Joe Minerals Corporation 250 Park Avenue New York, New York 10017	M												

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHG	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Dr. W. E. Rinehart Ethyl Corporation Laboratory of Environmental Medicine 1700 Perdido Street New Orleans, Louisiana 70012							CC						
W. J. Roberts Great Falls Reduction Works The Anaconda Company Great Falls, Montana 59401												CC	
M. V. Rose St. Joe Minerals Corporation Zinc Smelting Division Monaca, Pennsylvania 15061								M					
R. W. Rosenquest The New Jersey Zinc Company 2045 City Line Road Bethlehem, Pennsylvania 18017													
Dr. G. Roush, Jr. Ethyl Corporation Laboratory of Environmental Medicine 1700 Perdido Street New Orleans, Louisiana 70012							CC						
A. Sabatino Automotive Division Gould Inc. P.O. Box 3140 St. Paul, Minnesota 55101													AM

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	I P R C	L C C	L E H C	L M E C	Z P R C	Z C C	Z E C	Z E H C	Z M C
H. Sakurai Mitsubishi Metal Mining Co., Ltd. 277 Park Avenue New York, New York 10017					CC	CC	CC	CC	CC	CC	CC	CC	CC
Dr. A. J. Salkind Chairman - Battery Division ESB INCORPORATED The Carl F. Norberg Research Center Yardley, Pennsylvania 19068								AM					
Dr. E. B. Saubestre Enthone, Inc. Box 1900 New Haven, Connecticut 06508											AM		
J. H. Scaff Bell Telephone Laboratories, Inc. Murray Hill, New Jersey 07974													
R. Schmidt (Code-Air 52031 A) Department of the Navy Naval Air Systems Command Washington, D. C. 20360								AM					
Charles E. Schwab Vice President International Smelting & Refining Co. 25 Broadway New York, New York 10004	M												

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	LPRG	LCC	LEHC	LMEC	ZPRG	ZCC	ZEC	ZEHG	ZMC
R. D. Semmens The Broken Hill Associated Smelters Proprietary, Ltd. 95 Collins Street Melbourne, Vic. 3001, Australia								M					M
G. Sempels Societe des Mines & Fonderies de Zinc de la Vieille-Montagne Direction Generale B - 4900 ANGLEUR (Belgique)						M	M		M				M
J. G. Sevick St. Joe Minerals Corporation 250 Park Avenue New York, New York 10017													
Juan B. Sitges Compagnie Royale Asturienne des Mines Real Compania Asturiana de Minas Apartado N ^o 7, <u>Aviles</u> (Oviedo) Spain					M								
F. Slomba Gould National Battery Corporation 2620 University Avenue Minneapolis, Minnesota 55414													AM

NAME AND ADDRESS	Administrative			Lead Committee				Zinc Committee					
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	I P R C	L C C	L E H C	I M E G	Z P R C	Z C C	Z E C	Z E H C	Z M C
J. F. Smith Asst. to Gen. Mgr. Mfg. The New Jersey Zinc Company 2045 City Line Road Bethlehem, Pennsylvania 18017													
John R. Smyth ESB INCORPORATED The Carl F. Norberg Research Center Yardley, Pennsylvania 19068							AM						
James H. Standish Chairman Sulphide Corporation Pty. Ltd. 95 Collins Street Melbourne, Australia, 3000	M	M	M										
Kjell Stavnsborg Det Norske Zinkkompani A/S Drammensveien 30 OSLO 2, Norway									M				
Georg Steintveit Det Norske Zinkkompani A/S Eitrheim 5751 ODDA, Norway										M	M		M

NAME AND ADDRESS	Administrative			Lead Committee			Zinc Committee						
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Dr. J. D. Sterling, Jr. Petroleum Chemicals Research Section E.I. du Pont de Nemours & Co., Inc. Jackson Laboratory Wilmington, Delaware 19898						AM							
Simon D. Strauss Vice President of Sales American Smelting and Refining Co 120 Broadway New York, New York 10005	M	M											
R. Sugimoto Houston Chemical Company Division of PFG Industries, Inc. Box 4026 Corpus Christi, Texas 78408							M						
H. Tachimori Mitsui Mining & Smelting Co., Ltd 200 Park Avenue New York, New York 10017					CC	CC	CC	CC	CC	CC	CC	CC	CC
R.J.C. Tait Texas Gulf Sulphur Company, Inc. Toronto-Dominion Centre P.O. Box 150 Toronto 111, Ontario, Canada											M	M	M

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Dr. C. B. Tennant The New Jersey Zinc Company Palmerton, Pennsylvania 18071													
Roger J. Testut Director of Research Societe Miniere et Metallurgique de Penarroya 1, Boulevard de Vaugirard 75 Paris, 15 France	M	M	■		M				M				M
C. Thompson Hill & Knowlton, Inc. 150 East 42nd Street New York, New York 10017							CC						
Sunao Tokunaga Japan Lead Zinc Development Association New Hibiya Bldg. 3-6, Uchisaiwaicho 1-Chome, Chiyoda-Ku Tokyo, Japan							AM						AM
Dr. F. L. Tye The Ever Ready Co. (G.B.) Ltd. Central Laboratories St. Ann's Road Tottenham, London N.15, England											AM		

NAME AND ADDRESS	Administrative			Lead Committee				Zinc Committee					
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IIRC	ICC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
William J. Veenis Vice President Anaconda Sales Company 25 Broadway New York, New York 10004	M	M	M										
Dr. Jose Verdejo Compagnie Royale Asturienne des Mines Real Compania Asturiana de Minas Apartado N° 7, Aviles (Oviedo) Spain							M						
T. L. Vogt National Zinc Company, Inc. P.O. Box 579 Bartlesville, Oklahoma 74003										M	M		M
Dr. Jiro Wada Mitsui Mining & Smelting Co., Ltd 2-Chome Nihonbashi-Muromachi, Chuo-Ku Tokyo, Japan									M	M	M		M
C. A. Wahl Le Centre Technique du Zinc 34 Rue Collange 92 Le Vallois Perrett Paris, France												AM	AM

NAME AND ADDRESS	Administrative				Lead Committee				Zinc Committee				
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IPRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
F. L. Warner United States Smelting Refining and Mining Company 5300 Kennedy Avenue East Chicago, Illinois 46312					M		M	M					M
Dr. T. W. Watson Cominco Ltd. Sheridan Park Ontario, Canada													M
Dr. E. Y. Weissman Corporate Applied Research Group Globe-Union, Inc. 5757 North Green Bay Avenue Milwaukee, Wisconsin 53201								AM					
J. R. Wellington Cominco Ltd. Sheridan Park Ontario, Canada					M							CC	M
Jack Wilder President United States Smelting Refining and Mining Company 235 East 42nd Street New York, New York 10017													

NAME AND ADDRESS	Administrative			Lead Committee				Zinc Committee					
	MEM. REP.	BD. DIR.	EXEC. COMM.	STAFF	IFRC	LCC	LEHC	LMEC	ZPRC	ZCC	ZEC	ZEHC	ZMC
Frank G. Woodruff President The Bunker Hill Company Old National Bank Building Spokane, Washington 99201	M	M											
Dr. M. M. Wright Cominco Ltd. Sheridan Park Ontario, Canada						M		M		M			
G. W. Munder Director of Technology The Anaconda Company 25 Broadway New York, New York 10004													M
J. E. Zane Zinc Institute, Inc. 711 New Center Building Detroit, Michigan 48202											AM		
Dr. W. C. Zeek C. Tennant, Sons & Co., of New York 100 Park Avenue New York, New York 10017							CC					CC	CC
.....													
Errol J. Gay The Associated Octel Co., Ltd. 1019 Fisher Building Detroit, Michigan 48202												CC	

