

LEAD INDUSTRIES ASSOCIATION

488 LEEDINGTON AVENUE

NEW YORK 17, N. Y.

CONFIDENTIALSUBJECT TO REVISIONPIGMENTS AND CHEMICALS DIVISION

White Sulphur Springs, W. Va.

April 9, 1953

A meeting of the Pigments and Chemicals Division of the Lead Industries Association was held on April 9, 1953 at the Greenbrier Hotel, White Sulphur Springs, West Virginia. The following individuals attended:

MEMBERS

Harold Hertzog
H. F. Bittner
George Blackett
Vincent Dorman
R. Hermsdorf
J. J. Lennon
Thomas G. Moore
Jean Vuillequas
A. Corona

W. H. Vorelstein
W. B. Clancy
Lyman M. Hart
Julian S. Bors
Leon M. Rose
George E. Hiscaye

J. B. Haffner

A. W. Goose
A. Russell Mers
R. Hendricks

Henry L. Day
J. A. Stone
A. C. Jones
G. L. Knowles
T. B. Prickett
S. J. Stickley
W. R. Dice
G. P. Hense
Arthur R. Knight
J. A. Costello
Ray M. Evans
E. L. Newhouse, III

NON-RESIDENTS
ALPHA METAL, Inc.
American Metal Co. Ltd.

do

do

do

do

do

do

Compania Metalurgica Penoles, S.A.,
(American Metal Co. Ltd.)

do

American Smelting & Refining Co.

do

Bors & Co. Inc.

do

Broken Hill Associated Smelters Pty., Ltd.
(C. Tennant, Sons & Co., Agents)

Bunker Hill & Sullivan Mining & Con-
centrating Co.

Cambridge Smelting Co.

Cerro de Pasco Corp.

Consolidated Mining & Smelting Co.
of Canada Ltd.

Day Mines, Inc.

Division Lead Co.

E. I. duPont de Nemours & Co.

do

do

do

Eagle-Picher Co.

do

Euston Lead Co.

Ethyl Corp.

Evans Lead Co. (National Lead Co.)

Federated Metals Div., American
Smelting & Refining Co.



Pigments and Chemicals Division

April 9, 1953

-3-

R. A. Gardiner, Jr.
Clarence Glass

Frank A. Wardlaw, Jr.
Rudolph Spitzer
David A. Merson
P. W. Ruppert
Alex. Stewart
Kenneth T. Gordon
F. P. Gallagher
Charles R. Ince
Elmer A. Jones
R. J. Mechin
Felix E. Wormser
G. Howard LaFevre

George Mixer
Howard Novasol
Reuben Flesher
T. G. Stover

Gardiner Metal Co.
International Smelting & Refining Co.
(Anaconda Sales Co., Agents)
International Smelting & Refining Co.
Metro Smelting Co.
National Lead Co.
do
do
Granite Co.
River Smelting & Refining Co.
St. Joseph Lead Co.
do
do
do
United States Smelting Refining &
Mining Co.
do
Victory White Metal Co.
Hymen Vianer & Sons
Western Electric Co.

GUESTS

Max Adler
C. B. Anderson
William I. Powell
Miles P. Romney
James V. Stafford
F. F. Wolff

Allied Smelting Co.
Delco Battery Operations
American Mining Congress
Utah Miners Association
American Metal Market
Rudolf Wolff & Co.

GOVERNMENT REPRESENTATIVES

G. M. Bishop
Edmund E. Gertin
Thomas B. Nolan

U. S. Bureau of Mines
U. S. Department of State
U. S. Geological Survey

STAFF OF LEAD INDUSTRIES ASSOCIATION

Robert L. Ziegfeld, Secretary-Treasurer
David M. Borcina
Manfred Bowditch
Christy J. Vander Valk

The meeting was called to order at 9:30 A.M. by Alex Stewart, Chairman of the Pigments and Chemicals Division.

Mr. Stewart expressed his appreciation for the excellent attendance at the opening session of the Lead Industries Association Meeting. He then asked C. J. Vander Valk, technical director of the division, to review the progress of the red lead work during the previous year. A summation of the technical director's report is appended to these minutes.

Pigments and Chemicals Division

April 9, 1953

-3-

Following the report on the red lead activities Mr. Stewart spoke briefly on the importance of industry-wide support for research programs for the development of new lead products. He stressed the urgency of this problem by pointing to the steady decline in lead usage in several industries upon which the lead companies have depended for many years.

As an example of what can be done to develop new markets through intelligently planned research Mr. Stewart cited the development by his Company of a line of lead stabilizers for vinyl type plastics as well as several new lead pigments of low specific gravity. This has, only a few years after its inception, evolved into a new outlet for significant tonnages of lead. It is a particularly encouraging development in that the vinyl plastics industry is among the fastest growing new industries and the paint industry appears to be very receptive to low specific gravity lead pigments as it overcomes the cost factor, sustaining the use of lead pigments in exterior paints.

The meeting was adjourned at 10:30 A.M.


Secretary.

Pigments and Chemicals
Division Meeting

Appendix
April 9, 1953

REPORT OF C. J. VANDER VALK
Technical Director, Pigments and Chemicals Division

Our efforts this year have been concentrated mainly on promotional work. This promotional work was carried out through field contacts and the distribution of technical literature.

A limited amount of research was planned and initiated to add to the store of knowledge on red lead and to keep abreast of developments in vehicles.

The seventh in the series of Red Lead Technical Letters was published during the month of August. This bulletin contains several suggested complete red lead primer systems specifically designed for application to dams and adjacent equipment, ships navigating in fresh water, water storage tank interiors and industrial equipment exposed to chemical atmospheres.

Approximately ten thousand copies of this Technical Letter were distributed to individuals interested in the manufacture, specification and use of metal protective paints.

Another bulletin, the eighth in the series, on red lead paints for railroads has been approved by the Red Lead Technical Committee and will be printed within the next two or three weeks.

We have continued the practice of circulating monthly lists to red lead manufacturers of individuals requesting literature. This practice was continued during 1952. These lists are arranged according to state and city and include company affiliation and position of each individual requesting literature as well as the type of literature desired. These listings, containing several hundred names, have given an indication of the interest aroused by our promotional literature and have furnished valuable leads for follow up by the section's technical director and the technical sales staffs of our member companies.

Requests for several hundred additional pieces of red lead literature were received from our member companies.

Field visits were continued throughout this year to federal agencies, state highway departments, utility companies and paint companies. Many inquiries received on red lead paints were followed up by personal contacts. Conventions of the American Society for Testing Materials, Federation of Paint and Varnish Production Clubs and the National Association of Corrosion Engineers were attended both to keep abreast of newly reported technical developments and to keep up contacts with persons interested in protective coatings.

During the year the division's technical director served as secretary to the Government Advisory Committee on Chromate Pigments sponsored by the Corps of Engineers, U. S. Army. It is the purpose of this committee to evaluate metal protective paints based on lead chromate and other chromate pigments as well as standard and specification paints based on red lead. At our suggestion several red lead specification formulas and L.I.A. red lead formulas were included in tests sponsored by this committee.

The meetings of the Steel Structures Painting Council were also attended. The objectives of this Council are:

1. To review the art of cleaning and painting steel structures through

Pigments and Chemicals
Division Meeting

- 2 -

Appendix
April 9, 1953

REPORT OF C. J. VANDER VALK
Technical Director, Pigments and Chemicals Division (Cont'd)

literature surveys, conferences and other means, to determine and outline the best methods developed to date.

2. To issue codes or specifications covering practical and economical methods of surface preparation and painting steel structures, based on the present knowledge of the membership of the Council.
3. To issue from time to time recommendations intended to further improve, and to make more effective and more economical the protection of steel structures; such recommendation to be made available to specification and code writing committees.

The Lead Industries Association became a supporting member of the Council at the beginning of 1952. Mr. Liegfeld was appointed to the Executive Committee and the technical director to the Research Committee of the Council.

A painting manual and several paint specifications are now in process by the Council. Most of the systems recommended by the Council for long term protection are based on red lead primers. We feel that our active participation in the Council will aid us in promoting wider and more intelligent use of red lead paints.

The Red Lead Technical Committee initiated two research projects during the past year. The first is a comprehensive test of red lead base systems for new and rusted galvanized iron and for aluminum coated steel. The second project was set up to determine the relative merits of vinyl metal surface conditioners and anticorrosive paints containing red lead, zinc chromate and various other pigment materials.

Pigmentation of vinyl coatings is still a controversial subject even though it is known that lead compounds are especially well suited for combination with vinyl copolymers because of their inherent heat and stabilizing effects.

Periodic inspections of two cooperative paint projects were made during the year in the company of personnel of the Bureau of Ships, Norfolk Naval Shipyard and the Philadelphia Naval Shipyard.

A red lead base primer developed by the Red Lead Technical Committee was found to be outstanding in the marine atmospheric and tide range project sponsored by the Philadelphia Naval Shipyard. This primer has now been included in a second project for more thorough evaluation.

The project initiated by the Norfolk Naval Shipyard to evaluate primer paints under cold plastic antifouling paints for ship bottom was completed during the year. Inspections at five sites have shown two red lead systems to be generally superior to the other nineteen systems on test. These are the red lead-vinyl system and a red lead-coumarone type paint, both publicized in our Technical Letters.

A service test is now being carried out on one red lead bottom paint system that proved outstanding in the Navy-L.I.A. cooperative tests. Three hundred gallons of this anticorrosive primer have been applied to underwater hull sections of destroyers.

Pigments and Chemicals
Division Meeting

- 3 -

Appendix
April 9, 1953

REPORT OF C. J. VANDER VALK (CONT'D)

Technical Director, Pigments and Chemicals Division

The other anticorrosive paint proved best in the test has since the inception of the test been written into a military specification designated MIL-P-15929.

A considerable amount of our work with the Navy Department during the past several months has been concerned with the encouragement of the use of Navy Red Lead Formula No. 116 as an after-pickling or shop primer for new ship plate. Up to now this formula has been limited to use as a maintenance paint for all parts of ships above the water line. The use of this paint on plates for new ships will result in a significant increase in tonnage of red lead for paint use.

Although the Bureau of Ships is convinced that this red lead primer is superior to the currently used zinc chromate primer for new construction the question of the possible toxic effects of the fumes generated during the welding of the painted plates is holding up its adoption. Navy contract shipyards have asked the Bureau of Ships for assurance that the present ventilation factors set up for welding operations are sufficiently high to avoid dangerous concentrations of lead. Although no difficulty was experienced during extensive operations of this type in the Maritime Commission during the Second World War, the Navy wants quantitative data on the concentrations of lead generated when an arc is struck on ship plate coated with Formula No. 116.

After discussions with the paint, welding and hull construction sections of the Bureau of Ships a project was initiated to determine safe ventilating factors for the welding of lead paint coated ship plate. It has been proposed that this work be carried out within the next few months at the Harvard University School of Public Health and the Boston Navy Yard under the supervision of Professor Phillip Drinker, Consultant to the Navy and Maritime Commission on industrial hygiene problems. If carried out we feel that this will clear away the last major obstacle to the use of red lead paints for the initial coating on new ships.

Exhibit

This Division exhibited at the annual Paint Industries Show in Chicago during the week of November 17.

The booth featured illustrations on the practical application of red lead paints and test panels containing specification primers and selected systems developed by the Red Lead Technical Committee.