

LEAD INDUSTRIES ASSOCIATION

488 LEONSTON AVENUE

NEW YORK 17, N. Y.

Pigments and Chemicals Division

November 23, 1953

SUBJECT: PROGRESS REPORT AND
FINANCIAL STATEMENT
1952

**To Members of the Pigments and
Chemicals Division:**

Attached is a summary report of the activities of
the Pigments and Chemicals Division of the Lead Industries Associa-
tion during 1953 to date, prepared by Mr. C. J. Vander Valk, techni-
cal director of the Division.

Financial statement for the first ten months and
estimate for the full year is also attached.

Very truly yours,

Robert L. Ziegler
Secretary.



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SUMMARY OF 1953 ACTIVITIESPIGMENTS AND CHEMICALS DIVISION

(1) Intensive field work on lead base metal protective paints was continued with industry, the military forces and other public agencies. These groups were kept informed of the latest formulations established by the Red Lead Technical Committee and were encouraged toward the continued and increased use of red lead base paints. Special emphasis was placed on the adaptability of red lead base paints for an ever-increasing variety of applications and exposure conditions due to the development by the association of formulations containing many of the newer, more durable vehicles.

(2) The work with the U. S. Navy Department has continued to be fruitful. The final report on the Navy-L.I.A. Cooperative Project on bottom paints was issued by the Bureau of Ships on April 14, 1953. In the conclusions of this report two systems were selected as the best among thirty-seven. Both of these contained red lead base primers, one with a vinyl type vehicle and the other a coal-tar type vehicle. During the summer patch tests were initiated on a destroyer bottom. This ship is now in service and performance reports should be forthcoming during 1954.

The cooperative exposure panel tests with the Philadelphia Naval Shipyard are still in progress. The exposure results to date are extremely valuable in that the superiority of red lead over zinc chromate in sea water immersion is clearly indicated. This has been helpful in establishing a trend toward red lead-vinyls for all parts of ships undergoing continuous or intermittent sea water immersion.

(3) The position of Navy Formula 116 (a red lead base primer containing approximately 4 lb. red lead per gallon) was strengthened considerably by the issuance on March 27 of a Military Specification covering this formula. This paint is now used almost exclusively as the maintenance primer for ships' topsides. A second specification was issued on April 1 covering a dark shade of the same primer to offer contrast in multiple coat systems. These specifications were designated MIL-P-17545 and MIL-P-17546, respectively.

(4) A joint Navy-L.I.A. project was initiated on the evaluation of environmental exposures from welding operations over lead painted steel surfaces. It was hoped that the results of this test would show a minimal lead hazard in welding over red lead paints and help establish Navy Formula 116 as an after-pickling or shop priming paint in Navy and Contract shipyards. Dr. Leslie Silverman, a co-worker of Professor Philip Drinker at the Harvard School of Public Health, was engaged to carry out both the laboratory and field work on this project.

The project is being conducted under the terms of a contract specifying that the Lead Industries Association pay Dr. Silverman's fees and that the Bureau of Ships through the Boston Naval Shipyard furnish materials and welding personnel. The Board of Directors authorized a withdrawal of \$3,500.00 from the Division's reserve for use in setting up a special research fund to cover this work.

Although the laboratory work on this project has been completed no official report has been submitted by Dr. Silverman.

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(5) During the year the technical director continued to serve as secretary to the Government Advisory Committee on Chromate Pigments sponsored by the Corps of Engineers, U. S. Army. This committee was organized to evaluate metal protective paints based on lead chromate and other chromate pigments as well as standard and specification paints based on red lead. An elaborate exposure project was initiated to determine the relative merits of the various paints over steel, aluminum and magnesium surfaces. Conclusive results will probably not be available for at least another year.

(6) The association maintained its supporting membership in the Steel Structures Painting Council. The technical director of the division served on the Research Committee of the council and attended several meetings to discuss a comprehensive painting manual and the establishment of several specifications on surface preparation, metal surface conditioning, paint systems and paint compositions.

Several red lead base primers are included in the recommended practices of the council. The first ten recommended systems for general service on steel contain red lead primers. A painting manual containing these recommended practices is scheduled for publication in December of this year. This should prove helpful in maintaining the position of red lead as the leading corrosion inhibitive pigment.

(7) Conventions of the American Society for Testing Materials, Federation of Paint and Varnish Production Clubs, and National Association of Corrosion Engineers were attended to help maintain outside contacts and to acquire information on new technical developments in the paint and corrosion fields. The technical director also presented a paper on metal protective paints before the Southern New England and Eastern Wisconsin Sections of the National Association of Corrosion Engineers.

(8) The division exhibited at the annual Paint Industries Show in Atlantic City during the week of October 26. This exhibit demonstrated with the use of illustrations and test panels the advantages and proper usage of red lead and white lead in paints.

(9) Another in the series of Red Lead Technical Letters (No. 8) entitled "Paints for Railroad Structures" has been prepared by the Red Lead Technical Committee and will be published before the end of the year. This new bulletin will contain ten formulations suited for the protection of railroad structures and will be circulated to railroad personnel, corrosion engineers and paint formulators.

There has been a steady demand throughout the year for copies of all previous issues of Red Lead Technical Letters. Many requests for quantities have been received from companies and from engineering schools for use in paint courses.

(10) A new research project was initiated by the Red Lead Technical Committee to determine the relative merits of vinyl metal surface conditioners and anti-corrosive paints containing red lead, zinc chromate and other potentially competitive pigments.

(11) All L.I.A. and Navy cooperative panel projects were inspected at least twice during the year. The technical director also participated in group paint inspections of various structures under the auspices of the U. S. Corps of Engineers and the Steel Structures Painting Council.

PIGMENTS AND CHEMICALS DIVISIONFinancial StatementJanuary 1 to October 31, 1953and Estimated Full Year

	<u>Expenditures</u> <u>Jan. 1 to October 31</u>	<u>Estimated</u> <u>Expenditures</u> <u>Full Year</u>
Consulting Fees	\$ 250.00	\$ 300.00
Salaries	8,991.70	10,810.00
Social Security Taxes	159.40	165.00
Travel Expense	1,950.90	2,700.00
Telephone and Telegraph	171.90	150.00
Meetings	274.42	350.00
Entertainment and Luncheons	420.58	450.00
Printing	99.18	1,700.00
Illustrations	91.70	200.00
Research and Research		
Materials	1,390.44	1,500.00
Welding Research	1,750.00*	3,500.00*
Books and Subscriptions	47.93	50.00
Association Dues	40.50	50.00
Mailing	256.79	450.00
Conventions and Exhibits	675.97	1,300.00
Office Supplies	177.76	200.00
Advertising Space (WL)	566.00	570.00
Advertising Fees &		
Production (WL)	150.00	150.00
Miscellaneous	55.93	75.00
Total Expenditures	17,521.37	24,700.00
Balance, January 1, 1953	\$40,891.82	\$40,891.82
Less: Expenditures	\$17,521.37	\$24,700.00
Advance	400.00	400.00
	<u>17,921.37</u>	<u>25,100.00</u>
Balance, November 1, 1953	\$22,970.45	Est. Jan 1, 1954 \$25,791.82

*Special non-recurring expense authorized during the year.