

LEAD INDUSTRIES ASSOCIATION

480 LEXINGTON AVENUE

NEW YORK 17, N. Y.

METALLIC LEAD PRODUCTS DIVISION

October 26, 1954

SUBJECT: REPORT FOR 1954 AND
RECOMMENDED PROGRAM FOR 1955

To Members of the Advisory Committee of
the Metallic Lead Products Division:

We are attaching:

1. Summary of 1954 activities in the Metallic Lead Products Division, (Page 1-3),
2. Financial Statement for the Division covering actual expenditures from January 1 to September 30, 1954, (Page 4),
3. Financial Statement for the Division covering actual expenditures for the year 1953 and estimated expenditures for the year 1954, (Page 5),
4. Recommended Program for the Division for 1955, (Page 6-8), and
5. Estimated Cost of 1955 Program for the Division (Page 8).

In making the recommendations for 1955 I felt it advisable, in view of improved conditions in the lead market, and of new developments in some of the industries using lead products, to recommend all possible approaches to the promotion of the sale of metallic lead products. In this way the Committee will have complete information on which to base its discussions at the meeting on November 4th.

Very truly yours,

Robert L. Fitzgerald
Secretary.



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SUMMARY OF 1954 ACTIVITIES

METALLIC LEAD PRODUCTS DIVISION

The activities of this Division in 1954 have been directed principally towards the use of lead in chemical construction, plumbing and water works, and solder, with some attention to architectural sheet metal work and other applications of metallic lead products.

In the fields of chemical construction and solder, the work has proceeded along lines similar to 1953 but some major changes should be noted in our plumbing and water works activities.

In 1953 we had two field men conducting this latter work. During December, 1953 we were approached by the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada (the Plumbers' Union) for the loan of the services of one of our field men, Mr. Robert A. Camp. The United Association was sponsoring an international apprenticeship contest to be held on August 15, 1954 and Mr. Camp's services were desired to prepare the contest material.

Since much of the contest would be devoted to lead work and since Mr. Camp's presence at the headquarters office of the United Association in Washington would be a valuable contact for the L.I.A., Mr. Camp was granted a leave of absence starting January 1, 1954, to last through the international contest in August.

At the time of the contest, Mr. Camp was offered a permanent position with the United Association as Apprenticeship and Training Coordinator, with remuneration considerably in excess of anything this Association could pay him. Since we were unable to assure Mr. Camp of a position with the L.I.A. beyond our current 1954 budget, Mr. Camp accepted that position and is no longer in our employ. However, with the United Association he will be doing work of direct benefit to the L.I.A. in furthering better apprentice training, which constituted part of his work with us.

Consequently, we have operated in 1954 with one field man on plumbing and water works activities.

Another major change in the plumbing field has been the rapid growth in the use of prewiped and machine-wiped joints on lead connections. This apparently has reached its fullest development in the southeastern and southwestern parts of the United States. In general, these joints are being made by independent firms who purchase the lead material from lead manufacturers and whose business is entirely devoted to making prewiped joints for sale through the usual channels.

A recent survey by us indicates an absolute minimum of 10,000 such prewiped joints per month being sold by just two companies in the southern part of the United States, with one manufacturer using about 100 tons of lead pipe and fittings per year for this purpose and another using two or three times that amount. To our knowledge there are at least ten companies now engaged in this work on various scales.

The advantage to us of the growth in popularity of this product is that prewiped joints are considerably less expensive than hand-wiped joints, particularly those hand wiped on the job, the contractor knows his exact cost without a labor variable, and they eliminate the need for a large number of skilled lead workers. Thus lead plumbing becomes more competitive with other materials.

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The use of this product is growing rapidly and it is our belief that this trend will continue despite the opposition in some quarters by union plumbers. Also we believe that the Association should encourage this development particularly in those areas where little or no lead is now being used and in such a manner as would not jeopardize our good relations with skilled lead working plumbers.

Insofar as can be determined the use of this development will not have to overcome any restrictive plumbing code provisions such as is encountered in introducing new competing materials and was encountered by the lead and cast-iron drive ferrules some years ago.

The following is a brief summary of the activities of this Division:

- (1) The Solder Committee, composed of representatives of four member solder manufacturers under the chairmanship of Mr. D. M. Borcina of the staff, met several times during the year and has made substantial progress toward the preparation of a Soldering Handbook to be published by the American Welding Society.
- (2) This same committee, with Mr. Borcina as moderator, will present a panel discussion of new solder developments before the New York Chapter of the American Society for Metals on January 10, 1955.
- (3) Three new Chemical Bulletins for the information of members were issued in the first nine months of 1954. These are Nos. 55, 56 and 57 in the series.
- (4) Two additional Lead Chemical Construction Bulletins were sent to our list of nearly 1,300 chemical construction companies, professors and students of chemical engineering, chemical manufacturers and chemical engineers. These are Nos. 5 and 10 in the series.
- (5) The annual review of lead and lead alloys as materials of chemical construction was again prepared at the request of the American Chemical Society for publication in the October issue of "Industrial and Engineering Chemistry."
- (6) The section on "Lead Base Materials" for an "Engineering Materials Handbook" to be published by McGraw-Hill Book Co. is under preparation by us. It will set forth in detail the properties, forms, uses and all other pertinent data of use to engineers about lead and its alloys.
- (7) For the fifth successive year the lecture on "Lead as an Engineering Material" was presented before 200 graduate engineering students at the Newark College of Engineering.
- (8) A member of the staff, Mr. Kempton H. Roll, is chairman of the Northeast Region of the National Association of Corrosion Engineers, a valuable position for the lead industry in the field of corrosion.
- (9) He is also chairman of the Program Committee of the New York Chapter of the American Society for Metals and Mr. Borcina is also a member of that Committee.
- (10) Mr. N. S. Yetman continued as our representative in the plumbing and water works fields, making the usual contacts with city officials, plumbing groups, apprentice instructors, engineers and others in the interests of lead.
- (11) In addition to addresses before many local groups, he spoke before the annual meeting of the American Society of Sanitary Engineers. In this talk for the first time he called public attention to the availability of wiped joints through

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the usual channels, a statement which was singled out for attention in the report of the meeting, indication of the Trade's interest in this new development.

(12) We contributed the lead materials for the international contest for apprentices conducted by the Plumbers' Union and Mr. Borcina served as judge of the lead work. We are presenting defense bonds to the three best lead workers in the contest.

(13) Two issues of Plumbers' Forum will be published this year for our mailing list of nearly 20,000 plumbing contractors, journeymen plumbers, instructors, inspectors and jobbers.

(14) An article in Plumbers' Forum describing how lead plumbing was used in two large housing projects was reprinted in the Journal of the National Association of Housing Officials, picked up by United Press, and reprinted elsewhere.

(15) Members have continued their cooperation in our efforts to encourage apprenticeship training classes by supplying lead materials to such classes at minimum cost.

(16) Our text book "Lead Work for Modern Plumbing" continued to sell well, another 650 copies having been distributed in the first nine months. Sales are usually heaviest in the fall after the new school terms open. About 900 copies remain in our inventory.

(17) Request for our booklet "Lead in Modern Plumbing," first printed in 1951, are continuing and about 1,000 copies were distributed in the past nine months. Approximately 2,200 copies remain in inventory. Total distribution is now about 25,000.

(18) Mr. Yotman has continued to serve on the Plumbing Committee of the Building Research Advisory Board of the National Research Council.

(19) Staff members have devoted considerable time to a study of the development of prewelded joints in plumbing and how this development can be directed in the best interests of the lead industry and all concerned.

(20) Each issue of "Lead," now published semiannually and at no expense to this Division, contains two or more articles promoting metallic lead products to its circulation list of nearly 35,000 architects, builders, chemical companies, sheet metal contractors and the like.

(21) Specifications for chemical laboratory drainage systems were completed and, with some changes, received the approval of interested members. These are being mimeographed, will be circulated to members for their use and distribution, and will be offered through our own publications and the trade press to architects, engineers and plumbers.

(22) The material on architectural lead work for the 4th edition of Architectural Graphic Standards originally reviewed by L.I.A. some years ago, was again reviewed and brought up to date for a 5th edition at the request of the author.

(23) Hundreds of mail, telephone and other inquiries for assistance in the use of metallic lead products were handled during the year.

(24) We cooperated with the editors of "National Roofers" magazine in preparation of an article on the 3,000 lb. of lead flashing used on a model house in Vermont, installed under our recommendations. The article was published in the October issue.

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METALLIC LEAD PROJECTS DIVISIONFinancial StatementJanuary 1 to September 30, 1954Expenditures

Salaries	\$ 7,949.97
Social Security Taxes	139.50
Travel Expense	4,067.56
Mailing	199.45
PLUMBERS' PUM	1,556.46
Association Dues	143.25
Entertainment and Luncheons	491.12
Meetings	474.34
Telephone and Telegraph	147.37
Illustrations	74.66
Office Supplies	49.15
Printing	73.43
Books and Subscriptions	55.56
Apprenticeship Contest	406.15
Miscellaneous	57.17

Total Expenditures	\$15,815.14
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Balance, January 1, 1954		\$12,316.21
Receipts from:		
Subscriptions (Full Year)	\$25,464.00	
Less: Outstanding Subscriptions	<u>2,111.75</u>	\$23,352.25
"Lead in Modern Plumbing"		<u>622.47</u>
		\$36,290.93
Less: Expenditures	\$15,815.14	
Advances	<u>750.00</u>	<u>16,565.14</u>
Balance, October 1, 1954		\$19,725.79

(a) Option given to pay quarterly on this basis \$514.50 in arrears for the first three quarters.

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METALLIC LEAD PRODUCTS DIVISIONFINANCIAL STATEMENTFOR YEAR 1953 AND ESTIMATED 1954

	<u>Expenditures</u> <u>1953</u>	<u>Estimated</u> <u>1954</u> <u>Expenditures</u>
Salaries	\$16,600.00	\$10,600.00
Social Security Taxes	221.04	140.00
Travel Expense	11,407.63	6,000.00
Mailing	649.73	300.00
PLUMBERS' FORUM	3,501.56	3,000.00
Association Dues	207.00	200.00
Entertainment and Luncheons	838.83	650.00
Meetings	1,007.36	550.00
Telephone and Telegraph	497.75	200.00
Illustrations	223.78	100.00
Office Supplies	242.91	70.00
Printing	550.27	100.00
Books and Subscriptions	122.46	75.00
Contest	-	450.00
Miscellaneous Expense	411.85	75.00
"Lead Work for Modern Plumbing"	3,537.95	-
Conventions & Exhibits	2,034.68	-
Consultation Fees	350.00	-
Total Expenditures	\$42,407.80	\$22,510.00
Balance, Jan. 1, 1953	19,263.52	Jan. 1, 1954 12,316.21
Receipts from:		
Subscriptions (Full Year)	31,195.00	24,778.00
Sale of Publications	6,245.49	950.00
	\$34,724.01	\$38,044.21
Less: Expenditures	42,407.80	22,510.00
Balance, Jan. 1, 1954	\$12,316.21	Est. Jan. 1, 1955 \$15,534.21

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RECOMMENDED PROGRAM FOR 1955METALLIC LEAD PRODUCTS DIVISION

There are several directions in which the use of products of this Division may be promoted, some as in the past and others in new areas or by new methods. The time now seems particularly propitious to intensify our efforts in certain fields. For example, housing is booming and an increase in use of lead if only a few pounds per house would mean thousands of tons overall. Also the atomic field is a rapidly developing youngster that offers great opportunities. At the same time the lead market is better than it has been for several years, but the cost of lead is not too high to compete with other materials. We suggest the following specific activities:

1. Radiation shielding

Although there is considerable competition between materials, this is a field with possible tremendous potentialities for lead. Those have already been realized to a large extent in the case of x-rays and we have disseminated valuable information on lead's use in this respect. The advent of more competition with concrete, marble and other materials probably warrants additional publicity on lead's use with x-rays.

The nuclear field is one in which there is little available authentic information on shielding. It is here that the lead industry should take the initiative and be prepared to supply authentic data which will result in the greatest use of lead. There are few if any people who are experts in the broad field of shielding, but many experts in specialized fields. Attempts should be made to find one or more consultants or consulting and research organizations to collect and prepare authentic data on lead as a shielding material which can be published and distributed to the ever-increasing number of companies and engineers becoming involved in nuclear work.

2. Plumbing

For many years we have promoted lead in plumbing by working with the plumbing industry for favorable plumbing code requirements and to train a sufficient number of plumbers to install our material capably. The trend is definitely toward more liberal codes because of the greater variety of materials now available. Therefore, although we should continue to try to hold favorable code requirements whenever possible, it is more than ever essential that lead plumbing be sold on a competitive basis if its use is to be increased.

Fortunately we have had thrown in our laps a new means of accomplishing this, which has all the attributes to appeal to architects, engineers and contractors - modern, labor saving, cost saving, simplicity, known cost, yet superior quality and acceptable under practically all codes. This is the pre-wiped or machine-wiped joint. We believe that this can open large new fields for lead pipe and fittings while maintaining its present markets. The opportunity appears too good to miss and we should seize it now.

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We recommend, to take advantage of this situation, that our present field man continue his efforts to protect us through codes but that he also promote pre-wiped joints to the plumbing industry in those areas where lead is not now being used. This is too large an assignment for one man working in 48 states. Therefore, we should also employ a man to replace our other field man who has resigned. He should concentrate on selling the merits of lead to architects, engineers, and contractors on the grounds that they can now have the benefits of lead, which are many, at competitive cost. Suitable literature should be prepared to support these efforts. This man should have an engineering background, particularly in the construction field.

We further believe that pre-wiped joints have sufficient novelty to get considerable publicity in the plumbing, architectural and construction trade press.

On advice of counsel, the Lead Industries' Seal of Approval should either be discontinued or the licensing agreement changed. Under the present agreement the Association could conceivably be held financially responsible for damages resulting from the use of material bearing the Seal which does not meet the Standard. The change suggested would put the responsibility for claiming to meet the Standard on the manufacturer and thus relieve the Association of this responsibility.

3. Chemical construction

We believe that the work we have been doing with chemical engineering schools, chemical construction companies, chemical engineers, etc. should be intensified. For the past several years it has been conducted by one man half time. If the engineer mentioned in Section 1 is added to the staff part of his time could also be devoted to this work. This would enable us to increase the number of chemical construction bulletins we issue and the number of technical articles we get published in the trade press. It would be highly desirable to change our mimeographed chemical construction bulletins to printed bulletins, similar to the L.I.A. Red Lead Technical Letters, punched for binding in standard loose-leaf binders.

4. Solder

The L.I.A. Solder Committee should continue to function in cooperation with the American Welding Society. In fact, after the Soldering Handbook has been completed, continuation of this group as a permanent committee might well be considered to attack industry-wide solder problems and to disseminate new information on the use of solder that might benefit all solder manufacturers and users, since solder is one of the largest users of lead in metallic form.

5. Architectural sheet lead

A number of years ago at a cost of several thousand dollars the L.I.A. prepared drawings and a text for a book on architectural sheet lead work. This book was never published because of the advent of the War and a lack of funds. This Division might well consider publishing a more modest booklet on the most common applications of sheet lead work, such as flashings for the average residence, from the already prepared material and trying an intensive promotional and educational

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campaign among architects and sheet metal contractors in one or two limited areas. With copper expensive and relatively scarce, and with lead's advantages of color, non-staining and easy working, an extensive market might be developed, since lead for these purposes is now competitive in price and building is so active.

Following is an estimate of the cost of conducting the foregoing activities in 1955:

METALLIC LEAD PROMOTION BUDGET

ESTIMATED COST, 1955

Salaries (1 plumber, 1 engineer, 1 metallurgist)	\$12,000
Social Security Taxes	200
Travel	10,000
Miscellaneous Mailing	500
Plumbers' Forum	3,000
Association Dues	200
Entertainment and Lunches	800
Meetings	900
Telephone & Telegraph	400
Illustrations	300
Office Supplies	250
Printing & Mailing: Plumbing	3,000
Chemical Construction	3,000
Radiation Shielding	2,000
Architectural Sheet Lead	2,500
Books & Subscriptions	150
Apprentice Contest	450
Conventions & Exhibits	4,000
Consulting Fees & Research on Shielding	5,000
Miscellaneous	500
	\$55,000