

LEAD INDUSTRIES ASSOCIATION

489 LEXINGTON AVENUE

NEW YORK 17, N. Y.

METALLIC LEAD PRODUCTS DIVISION

September 14, 1951

SUBJECT: PROGRESS REPORT - 1951

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

We are attaching

1. Progress Report of the Metallic Lead Products Division for January 1 to August 31, 1951 (page 1 - 4),
2. Summary of Progress Report (page 5 - 6),
3. Financial Statement for the Division covering actual expenditures from January 1 to August 31, 1951, and estimated expenditures for year 1951 (page 7),
4. Recommended Program for the Division for 1952 (page 8 - 9), and
5. Recommended Budget for the Division for 1952 (page 9).

All of this material will be the subject of consideration at the meeting of the Advisory Committee of the Metallic Lead Products Division, to be held at 10:30 A.M., on Thursday, September 27, 1951, in the office of the Association.

Very truly yours,

Robert L. Ziegler
Secretary.



LEAD INDUSTRIES ASSOCIATION

430 LEONSTON AVENUE

NEW YORK 17, N. Y.

METALLIC LEAD PRODUCTS DIVISION

ANNUAL REPORT

METALLIC LEAD PRODUCTS DIVISION

JANUARY 1 to DECEMBER 31, 1950

The work of this Division was devoted primarily to the promotion of the use of lead products in the plumbing and water works and chemical construction fields, with some attention also being given to solder and to the use of lead products in architecture. The principal lead products involved are pipe, fittings, sheet, calking lead and, to a lesser extent, solder. All told, the products receiving attention in the work of this Division amounted to some 125,000 tons in 1950, or better than 10 percent of the total lead consumed in the United States. The work is largely fundamental in that it is not directed at increasing sales immediately but deals with legislation and education which result in maintained or enlarged markets in the longer future.

PLUMBING AND WATER WORKS PROMOTION

Field Work - The basis of our work in plumbing and water works promotion always has been field work, and continues to be so. During 1950 we have had two experienced plumbers and former plumbing inspectors in the field visiting plumbers, plumbing and water works officials, city officials and plumbing instructors all over the United States. Their work involves:

- (1) attention to plumbing ordinances to see that lead is specified wherever possible, and to see that it is properly specified,
- (2) to encourage plumbers to use lead in their plumbing installations whether required by code or not, and
- (3) to encourage the proper training of plumbing apprentices in lead work.

These objectives are accomplished by individual visits and by addresses before meetings of organized plumbers wherever possible. To date this year approximately 101 cities have been visited, many of them three or four times. Our representatives also attended 20 state conventions of plumbers and delivered addresses before many of them. With the cooperation of our members in supplying materials to plumber's classes at low cost some 1,90 apprentice classes are now teaching lead work throughout the country. It is only through the provision of an adequate number of mechanics able to handle lead that we can hope to have the use of lead expanded, or even maintained at its present level.



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"Plumber's Forum" - This little eight-page magazine, published four times a year, and circulated to 25,000 master and journeyman plumbers, plumbing instructors and plumbing inspectors has proved a very valuable addition to our field work. At relatively low cost, as compared with other publications, it reaches plumbers of us and our contacts four times a year and has made easy that it is impossible to obtain privately. It has been a means of reminding plumbers to call to our attention construction changes in plumbing codes thus making it possible for us to do the personal field work at the time and place it can do the most good.

Exhibits - For the first time in a number of years the Association again exhibited at the annual convention of the National Association of Master Plumbers, held in Chicago in May. The exhibit was well received and its cost kept low by adapting an exhibit used at another convention a year earlier.

In cooperation with the Red Lead and White Lead Divisions of the Association, this Division participated in a revolving exhibit showing the use of lead in building construction which appeared at the country's leading architectural schools for two weeks at each of the following:

Columbia
Yale
Rensselaer

Syracuse
Cornell
Pratt

Princeton

In addition after the college term it appeared at the Architectural League in New York for two weeks. The exhibit will appear similarly at the following colleges during the fall and winter terms:

Cincinnati
Miami
Illinois

Notre Dame
Western Reserve
Carnegie Tech

Ohio State

It is too early to evaluate the merits of this type of exhibit but we believe that it can do considerable good in educating the young architect in the specification of our material for modern construction. A survey is being conducted by us among the heads of the architectural schools involved to determine the merits of this exhibit.

"Lead in Modern Plumbing" - The original 15,000-copy printing of this booklet, which was issued late in 1950, was quickly exhausted and an additional printing of 10,000 was necessary early in 1951. The second printing is now almost exhausted and it is likely that a new printing will soon be necessary. The booklet has received an excellent reception and 5,700 have been purchased at cost by our members for their own distribution.

CORROSION ENGINEERING

Efforts to promote the use of lead in the construction of chemical equipment have been devoted largely to educational articles and talks. Among these were a series of four articles for "Chemical Engineering" which appeared during the year in that magazine's "Corrosion Forum Section." An extensive article entitled, "Specialty Metals Expand the Use of Lead Construction" was prepared and published in "Materials and Methods." Excerpts of all of these articles were collected and were circulated to the membership and to a list of chemical engineering colleges, chemical construction companies and lead bending contractors.

The Association is currently preparing a new section for "Chemical Engineering," which is expected to appear this year, on the performance of lead with all common corrosive chemicals.

A new book was published by the McGraw Hill Publishing Co., entitled, "Materials of Construction for Chemical Process Industries." This book gave favorable treatment to lead, much more so than most books on similar subjects. The lead material was largely taken from data supplied by us to "Chemical Engineering," a McGraw Hill publication, from time to time.

A two-hour lecture was delivered before about 100 graduate students at the Newark College of Engineering on the subject of "Lead as an Engineering Material." This was the second consecutive year that the Association was asked to deliver such a lecture. About 15 chemical manufacturing companies were visited. On several of these visits, informal talks were given before the plant engineers and purchasing personnel.

A member of the staff was elected vice chairman of the New York Section of the National Association of Corrosion Engineers, and was also put in charge of the preparation of programs for the meetings of that Section. This is the largest section of the N.A.C.E. in the country and the contacts thus developed are proving invaluable in the promotion of lead as a corrosion resistant material.

SOLDER

A member of the staff was asked to serve on the Soldering and Brazing Committee of the American Welding Society. This Society is preparing a Manual on Brazing and Soldering, the soft soldering part of which has been assigned to our staff member for preparation. The chairman of the Metallic Lead Products Division has appointed representatives of four member solder manufacturing companies to serve on a subcommittee with our staff member to prepare our section for the Manual, work on which has already been started. It will include solder and soldering methods for

Aluminum
Copper and Its Alloys
Ferrous Metals;
Carbon and Low Alloy
Iron
Stainless Steel
Heat Resisting Alloys

Lead and Its Alloys
Magnesium
Nickel and Its Alloys
Precious Metals

ARCHITECTURAL LEAD WORK

Late last year and early this year the Association supplied sheet lead for all the flashing on the metal hoes being constructed by "House Beautiful" which will be widely publicized in that magazine and later by ourselves. The lead has now been installed to our drawings and specifications and under our supervision, and the architect has expressed great satisfaction with the results.

"LEAD"

Although this Association magazine is not paid for out of the funds of this Division, nevertheless a number of articles on lead plumbing and chemical installation were prepared during the year and published in "Lead" which has a circulation of over 30,000 users and potential users.

MISCELLANEOUS

There has been the usual large volume of correspondence and telephone calls asking for technical assistance in the use of lead products, which assistance has been given.

The staff has been active in all of the leading technical societies dealing with metals.

Through Metallic Lead Products Bulletins the Division has been kept informed of pertinent developments such as Atomic Energy Commission requirements. Members have also been supplied with a series of Housing Bulletins, listing public and military housing projects as they are issued from Washington.

A staff member addressed the faculty and students of the Metallurgical Department of Yale University on the subject of "Recent Developments in Lead Metallurgy."

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PROGRESS REPORTANNUAL REPORT
January 1 to December 31, 1951

(1) Two practical field men have promoted the specification of lead in plumbing codes and its use in plumbing and water works systems by personal calls on plumbers, city officials, water works engineers and by addressing meetings of plumbers' organizations.

(2) They have also promoted the proper instruction in lead work of plumber's apprentices in schools throughout the country.

(3) "Plumbers' Forum," an eight-page magazine promoting the use of lead in plumbing, is mailed to 26,000 people in the plumbing industry four times a year.

(4) The Association had an exhibit on plumbing at the annual convention of the National Association of Master Plumbers.

(5) In cooperation with the Red Lead and White Lead Divisions, this Division sponsored a traveling exhibit on lead in building construction among 15 leading architectural colleges.

(6) The booklet, "Lead in Modern Plumbing" was reprinted, bringing the total circulation to nearly 25,000.

(7) Four articles on the performance of lead in contact with certain corrosive chemicals were prepared and published in the Corrosion Forum Section of "Chemical Engineering."

(8) A comprehensive article on "New Developments Expand the Use of Lead Construction" was prepared and printed in "Materials and Methods."

(9) Reprints of the foregoing articles were circulated to members, to chemical engineering colleges, chemical construction companies and lead burning contractors.

(10) A section on the performance of lead in contact in the all common corrosive chemicals is being prepared for publication this year in "Chemical Engineering" and reprints will be obtained for circulation.

(11) A new book "Materials of Construction for Chemical Process Industries" was published by McGraw Hill Publishing Co. and gave favorable treatment to lead based on data supplied by us to "Chemical Engineering" in the past.

(12) A lecture on "Lead as an Engineering Material" was delivered to 100 graduate students at the Newark College of Engineering.

(13) A staff member was appointed to the Bracing and Soldering Committee of the American Welding Society to prepare the soft soldering section for a Manual on Bracing and Soldering. Representatives of four solder manufacturing members were appointed to a special committee to work with him in the preparation of this section.

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(14) Installation of lead flashing on the model home constructed by "House Beautiful" was completed, following our drawings and specifications and under our supervision.

(15) A number of articles on lead plumbing and lead chemical installations were prepared and published in the Association's magazine, "Lead."

(16) Housing Bulletins, listing public and military housing projects as announced from Washington, were circulated to members, in addition to other bulletins containing pertinent information for the Metallic Lead Products Division.

(17) The faculty and students of the Metallurgical Department of Yale University were addressed on "Recent Developments in Lead Metallurgy."

(18) A large number of inquiries for assistance in the use of lead were handled by correspondence, telephone and personal contact.

(19) Liaison with all the principal technical societies dealing with metals was maintained by the staff.

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METALLIC LEAD PRODUCTION DIVISION

Financial Statement

January 1 to August 31, 1951

and Estimated Full Year

	Expenditures Jan. 1 to Aug. 31	Estimated Expenditures Full Year			
Salaries	\$ 9,883.39	\$33,905.			
Social Security Taxes	237.33	250.			
Travel Expenses	7,067.64	11,000.			
Mailing	483.36	750.			
FLUORINE FORGE	1,158.62	5,000.			
Association Dues	154.50	300.			
Entertainment and Luncheons	412.36	700.			
Meetings	906.43	1,500.			
Convention and Exhibits	1,360.11	1,500.			
Telephone and Telegraph	106.09	200.			
Illustrations	241.91	400.			
Office Supplies	77.16	150.			
Printing	1,106.62	3,500.			
Books and Subscriptions	48.09	100.			
Miscellaneous	255.09	500.			
Total Expenditures	\$23,456.50	\$39,835.			
Balance, January 1, 1951			\$ 6,332.90		\$ 6,332.90
Receipts from:					
Subscriptions (3 Quarters)	30,385.91				40,500.00
Less: Outstanding Subs.	202.75		30,183.16		-----
			36,516.06		46,832.90
Less: Expenditures	23,456.50			38,035.	
Advances	750.00		24,206.50	750.	38,785.00
Cash Balance, Sept. 1, 1951			\$12,309.54	Est. Jan. 1, 1952	\$ 8,047.90

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Recommended Program for 1952

The following activities are recommended for the year 1952:

1. Continue the plumbing field work on codes, apprentice classes, etc., with the present two field men.
2. Continue the study of chemical construction installations with the present one man, part time.
3. Continue bulletins to members informing them of housing projects, chemical construction information and general data relating to metallic lead products.
4. Inaugurate a new series of printed technical bulletins on the use of lead for chemical construction with various chemicals and in various industries for colleges, construction companies and corrosion experts, these bulletins to be punched for loose-leaf binding in engineer's hand-books.
5. Continue publication of "Plumbers' Forum" four times a year - eight pages.
6. Exhibit at the annual convention of the National Association of Master Plumbers.
7. Continue committee work on the Soft Soldering Section of the Manual on Brazing and Soldering for the American Welding Society.
8. Study the performance and possibilities of thin walled lead alloy water service tubing as produced and used in Canada in recent years.

The foregoing activities can be conducted for about \$12,000, or \$2,000 more than the budget for the current year, the increase nearly reflecting higher costs generally.

In addition, some or all of the following activities may be warranted, but require further study:

1. The National Association of Master Plumbers has suggested that we finance a National Lead Working Contest for plumber's apprentices in the apprentice training schools throughout the country which would be sponsored and conducted by the N.A.M.P., and the winner awarded first prize at the annual convention of the N.A.M.P. The cost of this Contest to us is currently estimated at about \$1,000.
2. It is recommended that the traveling exhibit on architectural lead work in the architectural colleges which we had this year be left dormant in 1952. It is felt that this exhibit in alternate years is sufficient since most students are in college for several years and

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would see the exhibit at least twice if it visited each college in alternate years. However, a similar traveling exhibit for chemical engineering schools is now being arranged by the members of the association and it may be a good thing for us to see. Before making any recommendation, however, we want a better opportunity to evaluate the results obtained by the architectural exhibit. The cost of the chemical engineering exhibit could be \$1,500.

3. The Texas A. & M. College has offered to cooperate with us in the preparation of a book on plumbing and pipe fitting techniques of joint welding and lead work for use in training apprentices. The College will bear part of the cost and it appears that our share would be approximately \$2,000. This would be an extremely useful work for a movie in sound and color and it would have excellent appeal to coming from the Texas A. & M. College. However, before making any definite recommendation we want to study further the means of circulating the film and how many schools and apprentices will use it and see it.

4. There is great need in the plumbing industry for a practical text book on joint welding and lead work. All of the material has appeared in a series of articles published throughout the years in "Plumbers' Forum." It would probably be wise at this time for the Association to gather all the material together in one book. This would probably cost about \$2,000 but no doubt it can be sold at a price which would recover at least a good part of the cost.

RECOMMENDED BUDGET FOR 1952

Based on the foregoing, we recommend a budget of \$42,000 for the year 1952 to carry on the basic and essential activities of this Division, most of which were conducted last year and for several years in the past.

In addition, we recommend that another \$8,000 be appropriated, to be used for any of the last four projects on which, at this time, we are not prepared to make definite recommendations as to their advisability, this extra appropriation to be spent on any of these projects only after approval of the Advisory Committee of the Division.

Therefore, we are recommending a total budget of \$50,000 for 1952, all to be subscribed, \$42,000 to be spent in support of the regular activities of this Division and \$8,000 to be reserved for new projects and spent in whole or in part only with the approval of the Advisory Committee of the Division.