

LEAD INDUSTRIES ASSOCIATION

450 LEXINGTON AVENUE... 60 East 42nd Street
NEW YORK 17, N. Y.

November 14, 1956

SUBJECT: AGENDA AND
BUDGET DATA

To the Industry Development Committee
of the Lead Industries Association

Following is a tentative agenda for the meeting of the Industry Development Committee, to be held on November 20, 1956 at 9:15 A.M., in the office of the Association, Suite 2020, 60 East 42nd Street:

TENTATIVE AGENDA

1. Approval of minutes of previous meeting (June 12, 1956)
2. Progress Report of Association Industry Development activities:

- (a) Metallic Lead Products Division
- (b) Pigments & Chemicals Division
- (c) Ceramic Fund
- (d) Radiation Shielding
- (e) Cable Sheathing
- (f) Research

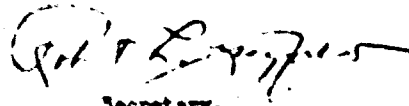
3. Budgets for 1957:

- (a) Metallic Lead Products Division
- (b) Pigments & Chemicals Division
- (c) Ceramic Fund
- (d) Radiation Shielding

Attached you will find detailed budget information relating to the four Association activities on which budget recommendations to the Board of Directors are requested at this time.

Also attached are two memoranda relating to Cable Sheathing and Research on which committees are at work but are not in a position to make specific recommendations as yet.

Very truly yours,



Secretary.



INDUSTRY DEVELOPMENT FUND

PERIOD: 1956 - 1957
(In Thousands of Dollars, Approximate)

	<u>INDUSTRY DEVELOPMENT FUND</u>	<u>METALLIC LEAD PRODUCTS DIVISION</u>	<u>PIGMENTS AND CHEMICALS DIVISION</u>	<u>CERAMIC INDUSTRY</u>	<u>RADIATION SHIELDING FUND</u>
1 Balance, January 1, 1956	\$10,000	\$25,000	\$ 8,000	\$ 2,000	\$ 2,500
<u>INCOME, 1956</u>					
2 Subscriptions	57,000a	6,000	4,000	-	-
3 Transfers from I.D. Fund		23,000	9,500	15,000	-
4 Sales of Text Book		1,000	-	-	-
5 TOTAL INCOME, 1956 (2+3+4)	57,000	30,000	13,500	15,000	-
<u>EXPENSES, 1956</u>					
6 Budget Approved	52,000	10,000	15,000	17,000	2,500
7 Estimated Actual	52,000b	11,000	18,000	17,000	2,500
8 INCOME OVER EXPENSES, 1956 (5-7)	5,000	-1,000	-4,500	-2,000	-2,500
9 Estimated Balance, Jan. 1, 1957 (1+8)	15,000	21,000	1,500	-	-
10 Recommended Expenditures, 1957	99,500c	10,000c	20,500	30,000	5,000

(a) At 7¢ per ton of pig lead sold.

(b) Transfers to other funds, including \$1,500 to Ordinary Fund for publication of "Lead" magazine.

(c) Income of at least \$500 may be expected from sales of text book in 1957.

METALLIC LEAD PRODUCTS DIVISION

The activities of this Division have for many years been directed towards the greater use of lead in building construction, primarily plumbing, in chemical construction, and more recently towards work on lead base solders.

BUILDING CONSTRUCTION

Until this year our efforts in this field have been largely directed towards the master and journeyman plumber. Our field men has addressed meetings of these groups, worked with city officials on code matters, encouraged broader apprentice training in lead work, and we have published "Plumber's Forum" twice a year for circulation throughout the plumbing industry.

At the beginning of 1956, however, it was felt that greater emphasis should be placed on selling the architect and builder on the advantages of lead, broadening the work to include not only plumbing but other uses of lead in building construction. We were authorized to add an architect to our staff to make these contacts. However, because of uncertainties regarding the future financing of this program, we have refrained from engaging an architect and have had our present plumbing field men make more contacts among architects and builders. We also issued two Building Construction Bulletins, designed to interest architects and builders in using more lead and giving them specifications and helpful data. These were circulated to some 30,000 architects and builders. We have also contracted for exhibit space at the annual convention of the National Association of Home Builders to be held in January, 1957, feeling that this will help us to determine the proper approach to this industry.

Our experience in 1956 leads us to believe that it will be unnecessary to add an architect to our staff in lieu of which we feel that insertion of catalogs on the various uses of lead in building construction in Sweets Catalog for 1958 should be considered, these catalogs to be prepared during 1957. Sweets Catalog is generally considered the "Bible" of architects and builders and nothing on metallic lead appears in Sweets, to our knowledge, except several catalogs on lead X-ray room linings. Continuation of our Construction Bulletins should also be considered to reach the architect and builder at frequent intervals. Since "Plumber's Forum" is now only on a twice a year publication basis, we feel that the cost of over \$3,000 is not justified and that discontinuance of this publication should be considered. In that event, we would recommend that our magazine, "Lead" be circulated to the key people on our "Plumber's Forum" mailing list. We also recommend that we continue, as much as possible, our contacts with the plumbing industry and city officials and our exhibit at the annual meeting of the National Association of Plumbing Contractors. Also, we should continue our encouragement of proper apprentice training in lead work and the distribution of our text book 7,500 copies of which have been sold to date and from which we expect eventually to recover our entire cost.

CHEMICAL CONSTRUCTION

Our efforts to encourage the use of lead in chemical construction have consisted largely of gathering technical information on how lead is used in actual installations, circulating this information to our members and to some 1500 people engaged in chemical construction and to schools of chemical engineering, and preparing articles on this subject for publication in chemical engineering trade papers, reprints of which are regularly obtained and circulated to the lists of people already mentioned. We do not recommend any change in this program in 1957.

METALLIC LEAD PRODUCTS DIVISION

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SOLDER

This work has largely consisted of preparing a Manual on Soldering which is to be published by the American Soldering Society. It has been conducted through a committee of representatives of member companies who make solder, under the chairmanship of a member of our staff. This work is progressing nicely and it is expected that the Committee's draft of the manual will be completed sometime in 1957. No change is recommended in this work.

BUDGET

In 1956 a budget of \$40,000 was approved for this Division. No change in this amount is recommended for 1957. The Advisory Committee of the Metallic Lead Products Division recommended adoption of a budget of \$40,000 for 1957. The distribution of this budget is as follows: \$11,500 for salaries, \$1,000 for printing, \$1,000 for office supplies, \$1,000 for miscellaneous expenses, \$1,000 for travel, \$1,000 for mail, \$1,000 for association dues, \$1,000 for entertainment and luncheons, \$1,000 for meetings, \$1,000 for conventions and exhibits, \$1,000 for telephone and telegraph, \$1,000 for illustrations, \$1,000 for books and subscriptions, \$1,000 for consulting fee, \$1,000 for apprenticeship contest, \$1,000 for building construction bulletin, \$1,000 for plumbers' forum, \$1,000 for sweets catalog, \$1,000 for "Lead", \$1,000 for publicity, \$1,000 for miscellaneous expense, \$1,000 for receipts from subscriptions, \$1,000 for "Lead Work for Modern Plumbing", \$1,000 for transfer from industry development fund, \$1,000 for balance, Jan. 1, 1956, \$1,000 for balance, Jan. 1, 1957, \$1,000 for less: expenditures, \$1,000 for estimated balance, Jan. 1, 1957, \$1,000 for balance, Jan. 1, 1958.

BUDGET DATAESTIMATED YEAR 1956 AND RECOMMENDED 1957

	1956 Estimated Expenditures	1957 Recommended Expenditures
Salaries	\$11,500	\$11,500
Social Security Taxes	180	350
Travel Expense	6,000	6,000
Mailing	300	350
Association Dues	170	250
Entertainment and Luncheons	800	1,000
Meetings	450	600
Conventions and Exhibits	3,500	4,500
Telephone and Telegraph	100	200
Illustrations	300	300
Office Supplies	75	100
Printing	1,000	1,000
Books and Subscriptions	175	200
Consulting fee	250	-
Apprenticeship Contest	450	450
Building Construction Bulletin	6,000	(-)
PLUMBERS' FORUM	3,100	(-)
Sweets Catalog	-	(-)
"Lead"	-	(13,000)
Publicity	-	(-)
Miscellaneous Expense	130	200
Receipts from:	\$33,500	\$40,000
Subscriptions	4,600	-
"Lead Work for Modern Plumbing"	900	-
Transfer from Industry Development Fund	23,000	40,000
	30,300	40,000
Balance: Jan. 1, 1956	25,100	22,160
	55,700	62,160
Less: Expenditures	33,500	40,000
Estimated Balance: Jan. 1, 1957	\$22,160	\$22,160

REPORT OF THE DIVISION

In recent years the activities of this Division have been devoted primarily to the promotion of lead pigments, particularly red lead, in metal protective paints.

This work has been going forward for some 15 years, originally designed to combat the increase in the use of red lead paint by the Navy during the war. It is believed that the work has been quite successful as evidenced by at least a partial return to the use of red lead by the Navy and by the fact that the Navy now is under consideration still further expansion in its use of red lead. Promotional efforts in that direction should not be relaxed.

However, the huge new Federal Highway Construction Aid Program offers a substantially enlarged potential market which should not be ignored. For example ENGINNERING NEWS-ROADS magazine has estimated an annual consumption of structural steel, most of which must be painted, in the highway program for the next 13 years at approximately two and one-half times what it has been in the past. The majority of state highway departments are now using red lead or red lead base paints, although many of these have alternate specifications permitting other materials. It is certainly conceivable that with this greatly expanded market competitors will attempt to get a greater share.

The Red Lead Technical Committee has recommended a slightly enlarged program for 1957 in order to concentrate more intensively on the highway program. The principal changes recommended in our activities are that during 1957 at least two Red Lead Technical Letters should be directed specifically at the painting of highway structures and that these should be supported by a modest advertising campaign of six one-page insertions in the magazine, ROADS AND STRUCTURES, which will reach a large number of interested people not now on our mailing list to receive the Red Lead Technical Letters.

Early in 1956 we retained the services, as an additional consultant, at a cost of \$100 per month, plus expenses, of a man who formerly was head of the Navy paint work at the Norfolk Naval Shipyard, in order to maintain closer liaison with the Navy. It is felt that in 1957 we could dispense with his services and maintain these contacts through our regular consultant, Dr. L. L. Carrick, members of the Red Lead Technical Committee and our own staff. This would partially compensate for increased activities in the direction of highway construction.

In 1956 a budget of \$15,000 was approved for this Division's activities of which \$9,500 came from the Industry Development Fund. A budget of approximately \$20,500 would support the program recommended by the Committee for 1957, as detail on the attached sheet along with 1956 expenditures.

BUDGET DATA

PIGMENTS AND CHEMICALS DIVISION
ESTIMATED YEAR 1956 AND RECOMMENDED 1957

	<u>1956</u> <u>Estimated</u> <u>Expenditures</u>	<u>1957</u> <u>Recommended</u> <u>Expenditures</u>
Consulting Fees	\$ 2,350	\$ 1,500
Salaries	6,800	4,000
Social Security Taxes	175	-
Travel Expense	2,000	1,000
Telephone and Telegraph	50	100
Meetings	125	200
Entertainment and Luncheons	50	200
Printing	1,800	2,500
Illustrations	100	100
Research and Research Material	1,100	1,500
Books and Subscriptions	25	50
Dues	75	100
Mailing	500	750
"Lead"	2,600	2,400
Office Supplies	75	100
Advertising Space	-	3,800
Advertising Production	-	500
Publicity	-	1,500
Miscellaneous Expense	100	200
	<u>\$17,925</u>	<u>\$20,500</u>
 <u>Receipts from:</u>		
Subscriptions	4,100	-
Transfer from Industry Development Fund	9,500	20,500
	<u>13,600</u>	<u>20,500</u>
Balances:	Jan. 1, 1956	Jan. 1, 1957
	8,035.73	3,700
	<u>21,635.73</u>	<u>24,200</u>
Less: Expenditures	<u>17,925.00</u>	<u>20,500</u>
Estimated Balance	Jan. 1, 1957	Jan. 1, 1958
	\$ 3,713.73	\$ 3,700

CERAMIC FUND

In the summer of 1955, at the suggestion of the Technical Steering Committee of the Lead Industries Association, and with the approval of the Industry Development Committee, the Ceramics Technical Committee, composed of representatives of members who sell lead products to the ceramic industries, was formed to investigate the possibility of a program to improve lead's position in these industries and to recommend a program of activities.

As a result, it was decided to engage the services of a competent ceramist as consultant to the Association, to prepare a Manual which would incorporate all the present technical knowledge that the Committee could gather on the use of lead in ceramics, and to distribute this Manual as widely as possible throughout the ceramic industries.

Dr. John H. Koenig, director, School of Ceramics, Rutgers University, was retained as consultant to serve as chairman of the Committee. The Manual was prepared, printed and is being distributed to some 4,000 or 5,000 people in the ceramic industries.

A budget of \$18,000 was provided for this work to carry it to the end of 1956. The funds were appropriated from the Industry Development Fund.

Now that the Manual has been prepared and is being printed, the Ceramics Technical Committee met to determine what steps should next be taken to further the use of lead in ceramics. It recommended four activities, to be started in 1957, as follows:

1. RESEARCH FELLOWSHIPS ON SPECIFIC APPLICATIONS

The Committee recommended establishment of three research fellowships at three different schools of ceramics, as follows:

- a. To review and complete the properties of lead compounds themselves, which were found to be incomplete in preparing the Manual, and to evaluate lead as a component of typical ceramic bodies. The latter is to investigate added strength imparted by lead to ceramic bodies at lower temperatures in a shorter time. Preliminary work at Rutgers indicated this possibility and the Committee felt that it should be immediately pursued as there is great interest in the ceramic industries in low fluxing of ceramic bodies at this time. It was recommended that this fellowship be assigned to the School of Ceramics at Rutgers University.
- b. To investigate the development of lead enamels for low firing on steel and the effect on color. This was felt advisable because of the experimental use at this time of low firing enamels for steel, some of which contain lead. It was suggested that this fellowship be assigned to the School of Ceramics at the University of Illinois, which is preeminent in the field of porcelain enameling.
- c. To evaluate lead as a component of typical glasses, to be assigned to the School of Ceramics at either Ohio State or Alfred University.

The Committee felt that each fellowship would cost approximately \$2,500 per year and that each should be established for a period of at least three years, starting with the school year in the fall of 1957.

CERAMIC FUND

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This phase of the program has been considered by the Technical Steering Committee which has given its approval.

2. TRADE PAPER ADVERTISING

The Committee recommends that a technical trade paper advertising campaign setting forth the properties and merits of lead compounds for use in ceramics should be started with one page monthly advertisements in CERAMIC INDUSTRY magazine and the BULLETIN of the AMERICAN CERAMIC SOCIETY. There are several other publications in the field but the Committee feels that for the time being this would give adequate coverage and would supplement the advertising of members which is directed towards promoting the use of their own particular brands.

3. SUPPLEMENTS TO THE MANUAL ON CERAMICS

The Manual, which has been prepared, was purposely printed in loose-leaf form so that it might be brought up to date with supplements to fill in any information lacking at the time of original preparation and to add information dealing with new technical developments since the original publication. The Committee feels that because of developments which have taken place recently and because of certain lacking information, approximately eight pages of supplemental material should be prepared, printed and distributed during 1957.

4. PERMANENT EXHIBITS AT CERAMIC SCHOOLS

The Committee feels that permanent exhibits at most of the leading schools of ceramics will help to keep lead before both the professors and students and to educate them to the basic properties and advantages of lead in ceramics. It recommends that from 15 to 18 such exhibits be prepared during 1957.

BUDGET FOR 1957

The foregoing seems to be a well rounded and realistic program directed at an industry which is a potential user of substantially more lead than it is now using, estimated by the Ceramics Technical Committee at from two to four times present consumption of about 25,000 tons per year. Visits to ceramic plants in the field indicate that there are already new developments which will lead to the consumption of more lead by that industry but there is also strong competition. Because lead may be toxic and because it frequently adds to the cost of the ceramist's raw material, although reducing his manufacturing costs and improving his product, there is constant effort by the ceramic industry to find substitutes that will do the job. We believe that a strong effort to promote lead will successfully combat this competition if undertaken promptly and intensively enough. A budget to promote the recommended activities would amount to \$30,000 for the year 1957, as detailed on the attached sheet.

BUDGET DATACERAMIC FUND
ESTIMATED YEAR 1956 AND RECOMMENDED 1957

	<u>1956</u> <u>Estimated</u> <u>Expenditures</u>	<u>1957</u> <u>Recommended</u> <u>Expenditures</u>
Consulting Fees	\$ 1,300	\$ 2,200
Salaries	3,000	4,000
Travel Expense	300	1,000
Office Supplies	50	200
Meetings	100	200
"Lead"	1,000	1,000
Books and Subscriptions	25	50
Telephone and Telegraph	70	100
Entertainment and Luncheons	25	250
Research	-	1,500
Advertising Space	-	5,500
Advertising Production	-	1,000
Publicity	-	1,500
College Exhibits	-	1,000
Manual Supplements	-	2,000
Manual	10,500	-
Miscellaneous Expense	400	500
	<u>\$16,770</u>	<u>\$30,000</u>

Receipts from:

Transfer from Industry Development Fund	15,000.00	30,000
Balance: Jan. 1, 1956	1,806.34	Jan. 1, 1957 35
	<u>16,806.34</u>	<u>30,035</u>
Less: Expenditures	<u>16,770.00</u>	<u>30,000</u>
Estimated Balance: Jan. 1, 1957	\$ 36.34	Jan 1, 1958 \$ 35

RADIATION SHIELDING

About a year ago the Technical Steering Committee and Industry Development Committee recommended to the Board a program on lead radiation shielding to cost about \$15,000 per year. It consisted essentially of assigning a staff member with "Q" clearance full time to gather all available information about how lead is or should be used for atomic shielding, and disseminating this information as widely as possible throughout the atomic industry. To be sure that all information was technically correct, the services of a recognized consultant in this field were provided to guide the staff member.

Action on this program was tabled at the Board meeting in April, 1956, at the request of Mr. J. A. Martino, who wanted an opportunity to discuss it further with his director of research, Dr. Alex Stewart. Subsequently Dr. Stewart wrote the secretary (see copy attached) restating his views that such a program would be desirable, but some differences of opinion have since developed in other directions.

Consequently the matter was again referred to the Technical Steering Committee on November 9, 1956. This Committee now formally recommends a modified program which would cost about \$5,000 a year at the start. This program would have a staff member "Q" cleared and gather information part time on the use of lead as a shielding material. It does not provide for a consultant since the information gathered would not be disseminated at this time but would be used to answer inquiries on the subject which the Association cannot avoid getting.

It would be the intention to review this program after it had been in operation for a while to determine whether a program to put the information gathered to broader use would be desirable.

RECOMMENDED BUDGET, 1957

Expenditures:	
Salaries	\$ 3,500
Travel Expense	1,000
Miscellaneous Expense	<u>500</u>
Total Expenditures	\$ 5,000
Receipts	
From Industry Development Fund	\$ 5,000

COPY

NATIONAL LEAD COMPANY

111 Broadway

NEW YORK 6, N.Y.

ALEX. STEWART
Director of Research

June 12, 1956

Mr. R. L. Ziegfeld
Lead Industries Association
60 East 42nd Street
New York 17, New York

Atomic Energy Developments

Dear Bob:

With reference to a meeting held in your office on February 23 discussing what might be the best approach for the Lead Industries Association to take toward advising its members in regard to new business opportunities in atomic energy developments, as a result of a discussion of this subject at the annual meeting in St. Louis, Mr. Merson suggested that I might drop you a note.

You will recall that I recommended against continuing with the Walter Kidde Nuclear Laboratories on a market survey as the problem was not one of market but of specifications and shapes.

We did recommend that such a job could be done better by an LIA staff member who is already quite familiar with lead and its properties as well as the lead industry.

We further pointed out that substantially all the information required is available in the various AEC libraries around the country and that an LIA staff member might visit these units (with proper security clearance), collect the information and data. We also suggested that a consultant might be made available to the staff member to clear the information for accuracy before being circulated. In this connection we thought that Dr. Lyle Borst, an authority in reactor technology, might be interested. Inasmuch as the contacts with Dr. Borst might not be too frequent, we believed he might be had for \$3,000. - \$4,000. per year or possibly less.

I would definitely recommend against employing an outside man trained in reactor technology at this time as the problem deals more with the properties of lead as applied to reactor shielding. Therefore, an LIA man could more adequately collect the available specification and shape data clearing with some one like Dr. Borst.

Yours very truly,

c.c. Mr. D.A. Merson

Alex. Stewart (Signed)

CABLE SHEATHING

At the direction of the Technical Steering Committee, the Cable Sheathing Task Group of that Committee has been working for about a year and a half on a possible research program to protect and expand the market for lead in this field.

It now has a subcommittee negotiating with the principal manufacturer of continuous extrusion presses in this country, for a research program to perfect the continuous extrusion of lead alloys commonly used for cable sheathing.

While no detailed report can be made at this time, preliminary information indicates that such a program can be conducted in the plant of the press manufacturer, through the rental of necessary equipment, under the guidance of the Cable Sheathing Task Group, at a cost to the Association of somewhere in the vicinity of \$3,600 a month for a six-month program. Should the research have to continue beyond the six-month period, the cost per month would be materially reduced, probably to around \$1,800 a month.

RESEARCH

On November 9, 1954, the Technical Steering Committee of the Association met to consider the overall research problems of the Association.

As indicated elsewhere in the budget data, the committee approved recommendations for the establishment of three fellowships in various fields of ceramics research, and a program for gathering of technical information in connection with the use of lead in the nuclear field.

It also appointed a subcommittee to obtain a proposal from an independent research organization for a survey for the Technical Steering Committee on which that Committee might base further consideration of research programs it believed would be beneficial to the greater use of lead in industry. Nothing further can be reported at this time.