Lead Industries Association, Inc.
295 Madison Avenue • New York, N.Y. 10017 • Tel. (212) 578-4750 • Fax (212) 684-7714

NOTES FROM CENTRAL COMMITTEE CONFERENCE CALL

SMELTER BLOOD LEAD SURVEY PROGRAM

January 29, 1992

PARTICIPANTS

Paul Deveau	Noranda
Karen Hogan	EPA
Jeff Miller	LIA
Patrick Phillips	MO Dept. of Health
Bob Putnam	PES/CITE
Don Robbins	ASARCO
Gene Shippen	Consultant for Exide
Jerry Smith	LIA
Dan Vornberg	Doe Run

PROGRAM DESCRIPTION

The committee reviewed the program description and made several modifications as indicated in the latest draft. The program is being distributed to the Central Committee members for final review and approval.

SELECTION OF ANALYTICAL LABORATORY

The consensus of the committee was that the central laboratory should have the capability to detect blood lead levels as low as 1.0 µg/dl. Gene Shippen offered to contact two additional laboratories for proposals -- Smith Kline and American Medical -- in addition to ESA and Metpath. It was stressed that selection of laboratory must be completed promptly so that an anlytical protocol can be written, reviewed and approved.

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COMPANY RESPONSES TO PROGRAM

It was agreed that some smelters would need encouragement and further counselling in order to persuade them to participate in the program. Dan

Vornberg will be discussing the program at a meeting of the Association of Battery Recyclers in early February and Karen Hogan offered to draft a letter of encouragement.

CONTROL CITIES

Pat Phillips is researching the identification of control cities as part of the program. The committee offered to assist Pat through the one-day hiring of a clerical assistant for research gathering. Pat will distribute a proposal by March 2, 1992 to the Epidemiological Subcommittee (Phillips, Hogan, Putnam, Shippen) for review. The subcommittee will then make recommendations to the full committee.

SURVEY FORMS

The committee agreed that the sample forms for parental consent and background questionnaire were either too brief or too detailed. Miller will prepare two new draft forms for review by the committee.

(2/6/92)

DRAFT

SMELTER BLOOD LEAD SURVEY PROGRAM

A. GOAL AND PURPOSE OF SURVEY

1. Survey Objectives
   - The objective of this survey is to establish an up-to-date cross sectional survey of blood lead levels of young children, pregnant mothers (as a surrogate for unborn children), women planning to become pregnant, and nursing mothers, living in communities around operating Primary and Secondary Lead Smelters within the United States.
   - This outline will be used to provide a uniform method of surveying the blood lead level of the target population.
   - The results will be used by individual smelters and Communities to assess the lead status of the at-risk population and by the industry as a whole to provide a comprehensive picture of the actual impact of the smelting industry today.
   - It is expected that the actual sampling will occur in calendar year 1992. Smelters will not be asked to repeat surveys in communities if similar surveys have been conducted within the last two years (1990 or 1991). However, the results from these previous surveys will be included in the final report in order to present a comprehensive picture.
   - Participation is premised on the voluntary cooperation of the individual smelters and the communities in which they operate.

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B. COORDINATION/MANAGEMENT OF THE STUDY

1. Central Committee
   - Central Committee will oversee the development of the program, its administration, the hiring of the laboratories, the preparation of the reports, selection of the Control

Communities and guidance to the local committees with regard to public relations and other matters.

- Members of the central committee:

Gerry Dumas	RSR Corporation
Jeff Miller	LIA
Patrick Phillips	Epidemiologist - MO Dept. of Health
Bob Putnam	Public Health Consultant
Don Robbins	ASARCO, Inc.
Gene Shippen	Physician
Dan Vornberg	The Doe Run Company
Karen Hogan	EPA
John Baranski	Exide Corporation

2. Local Committee
   - Each participating smelter will appoint a company representative to be a survey project manager and will organize a Local Committee that will implement the survey within that community. The Local Committee might include local and/or state health officials, regional EPA representatives, smelter representatives, local political leaders, as well as community representatives if appropriate. This committee would be responsible for coordination of the sampling, informing and obtaining permission where appropriate of local officials and the public, individual and local release of the survey results, and coordination with the Central Committee.

C. COLLECTION OF SAMPLES

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1. Population Surveyed
   - The survey would target four categories: 100% of the 6 - 72 month old children, expectant or nursing mothers, or women planning to become pregnant that live in the target area. In practice something less than 100% will be sampled although it has been shown that participation above 90% is possible.

- The study area for all smelters will be a radius of 1 - 1.5 mile around the main stack as determined by the Local Committee. These distances are suggested because they are zones of anticipated impact based on ambient air modeling. These may be varied somewhat for specific geographic reasons, or if a study has already been completed in the area. The study area should not be expanded simply to include a larger population, as this will skew the results. Smelters without any population within the specified radius will simply be reported as such.

2. Control Populations
   - Control communities will be utilized to represent urban and rural controls in order to validate methods on non-impacted areas and to provide a frame of reference for current background blood lead levels. Such Control Communities will be selected by the Epidemiological Subcommittee of the Central Committee (Phillips, Hogan, Shippen and Putnam).

3. Approach to Sampling
   - Sampling may be conducted in one of two ways; either door to door sampling or by visits to a clinic within the sample area. Sampling should be done by a team selected by the Local Committee which could include a public health representative, a smelter representative, and a qualified phlebotomist.
   - The months, days, times of sampling will be determined by the Local Committee. The procedures for the sampling will be developed by the Local Committee. Samples will be by venipuncture. A questionnaire will be administered at the time of the sampling (see sample Attachment I).

D. ANALYSIS OF SAMPLES

1. Selection of Laboratory
   - A single laboratory with CDC accreditation will be selected by the Central Committee with a second laboratory utilized to

run quality control on the first (10% of the total number of samples will be sent to the second lab.) The selected laboratories will demonstrate a lowest limit of detection for blood leads at 1 μg/dl.

2. Quality Assurance
   - Quality control will be part of the analytical protocol.
   - The laboratory will provide sampling vessels, mailing systems and instructions to the participants in the program to insure uniformity and assure quality.

E. RESULTS

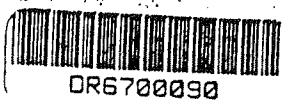
1. Presentation of Nationwide Results
   - Local Committee will provide results to the Central Committee for preparation and release of a Composite Nationwide Report.

2. Use and Release of Local Results
   - Local release of sampling results will be coordinated by the Local Committee.
   - Individual results will be released to the individual, not to the general public.
   - Individual privacy shall be protected by a confidentiality agreement. (See sample Attachment II.)

3. Follow-up
   - When appropriate, blood lead results will be referred for follow-up to the local health department on the basis of CDC guidelines.

F. COSTS

1. Health Department
   - Health Departments would pay for their own representatives on the Local Committees. Other costs, e.g. phlebotomists, clerical help, office space, furniture, or equipment, will be resolved by the Local Committee.



2. Smelter
   - Smelters should expect to pay all other costs, including sampling, lab work, labor, rents, and public notices.

3. Central Committee
   - Costs of the members will be borne by their respective organizations.
   - Costs for sampling the Control Communities will be borne by the LIA Product Stewardship Program.

G. LOCAL OUTLINE OF THE PROGRAM

1. Smelter Activities
   - Identify a Survey Project Manager and additional smelter staff as needed.
   - Solicit the cooperation and assistance of the local, county and/or state health departments, community leaders, political, and school officials, etc.
   - Help establish a Local Committee of company, medical, health and other community elements.

2. Local Committee Activities
   - Define the study area. 1½ miles of smelter
   - Select either the door to door sampling protocol or the clinic visit protocol.
   - Design the sampling campaign.
   - Plan for the dissemination of the results.
   - Proceed with the survey.
   - Disseminate the results of the study.
   - Follow-up as appropriate.

(2/6/92)

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RETURN FAX TO JEFF MILLER, LIA – (212) 684-7714 BY FEBRUARY 17, 1992

Below is my approval (non-approval) of the draft Smelter Blood Lead Survey Program dated February 6, 1992.

☑ Approved as written.

☐ Approved with the following minor changes.

_____

_____

_____

_____

_____

☐ Rejected for the following reasons.

_____

_____

_____

_____

_____

NAME Paul Lowry

DATE Feb 05, 1992

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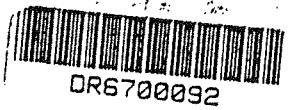
(2/6/92)



DRAFT SAMPLE FORM

(COUNTY DEPARTMENT OF HEALTH LETTERHEAD)

Participant Consent for Blood Lead Testing

Outline:
The (County) Department of Health, in cooperation with the (Company Name), is conducting a survey of possible exposure to lead among selected residents of (County). My participation (or my child's) will help determine if there is exposure to high lead levels. This test is for

(____) Myself (____) My child/ward

A blood sample of approximately 7 milliliters (ml) [3 ml for children less than 6 years old] will be taken with a needle from a vein in the arm by a licensed medical professional. There is little risk associated with this procedure. Temporary discomfort and a small bruise may occur at the site where the needle enters the skin.

Participation: I understand that my participation will take no more than thirty minutes. There will be no physical examination. There will be no provision for injury compensation or medical treatment as a result of my (or my child's) participation, and I hereby release the (County) Department of Health from any obligation in that regard. I understand that I can stop our participation at any time. If I choose not to participate or to stop, there will be no penalty.

Results: As a result of my (my child's) participation in this survey I (my child) will receive a blood test for lead. No other laboratory tests will be run. There will be no charge to me for any of these tests. The (County) Department of Health will send me a letter with the test results and will refer us for medical evaluation, and possible additional testing, if indicated by our results.

Confidentiality: I understand that the (County) Department of Health will take every reasonable precaution to keep our records confidential. Any reports of this survey will not identify specific individuals by name, address, etc., and will only give group information.

Participant consent: I have read the description of this survey. All of my questions have been satisfactorily answered. I (my child) _____, voluntarily agree(s) to participate.
Printed Name

Participant/guardian name (print) _____

Signature _____

Date _____ Witness _____

Participant ID No. _____

If you have any questions, please contact:

(Name), (County) Health Department, Phone: _____

(Name), (Company Name), Phone: _____

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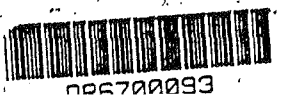
DISCLAIMER: This is a proposed draft consent form. The final form of any consent is the sole responsibility of the County Department of Health and its Legal Department administering the survey. The Lead Industries Association can accept no responsibility for use of all or any portion of the form.



DRAFT

(COUNTY) HEALTH DEPARTMENT
BLOOD LEAD SURVEY QUESTIONNAIRE

A. NAME OF PARTICIPANT:

_____

Address:

_____

_____

_____

Phone #:

_____

CATEGORY:

- ❑ 6 - 72 month child
- ❑ Nursing mother
- ❑ Pregnant woman
- ❑ Woman planning to be pregnant

Date of Birth: _____

If child: Name of Parent/Guardian:

_____

Address (if different):

_____

_____

_____

Phone:

_____

ID #: _____

DATE: _____

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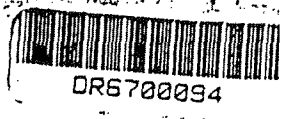

B. HOUSING:

1. Do you ❑ own ❑ rent?

2. Approximate age of house _____

3. Type of exterior

❑ Brick ❑ Block ❑ Other _____
❑ Paint ❑ Siding ❑ Don't know

4. Source of water:

❑ City ❑ Well ❑ Don't know
❑ Bottled ❑ Other _____

5. Type of Water Piping:

❑ Copper ❑ Iron/Steel
❑ Plastic ❑ Other _____
❑ Lead ❑ Don't know

6. Is the exterior paint peeling?

❑ Yes ❑ No

7. Is the interior paint peeling?

❑ Yes ❑ No

8. Have you done any recent paint stripping, scraping, sanding?

❑ Yes ❑ No

9. Type of heating fuel.

❑ Gas ❑ Coal ❑ Don't know
❑ Oil ❑ Wood
❑ Electricity ❑ Other _____

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C. OCCUPATIONS/HOBBIES:

1. Does anyone ~~in~~ your household work in the following occupations?

- ❑ Smelting
- ❑ Battery making
- ❑ Mining
- ❑ Automotive repair
- ❑ Plumbing
- ❑ Electronic manufacturing
- ❑ Paint removal
- ❑ Highway striping
- ❑ Ceramics
- ❑ Ammunition
- ❑ Firing ranges
- ❑ Stained glass
- ❑ Crystalware
- ❑ Scrap metal recovery
- ❑ Bridge painting

2. Is anyone in your household involved in the following hobbies?

- ❑ Artist painting
- ❑ Stained glass
- ❑ Electronic soldering
- ❑ Pottery
- ❑ Ceramics
- ❑ Self casting of bullets/fishing weights/figurines
- ❑ Gun clubs
- ❑ Home gardening

3. Have you recently purchased any new ceramicware?

❑ Yes ❑ No

D. PERSONAL HYGIENE

1. Does your child chew on fingernails?

❑ Yes ❑ No

2. Does your child suck his/her thumb?

❑ Yes ❑ No

3. Does your child wash his/her hands before meals?

❑ Yes ❑ No

4. Does your child put foreign objects in his/her mouth?

❑ Yes ❑ No

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5. Does your child teethe on furniture, window sills, or other painted objects?

❑ Yes ❑ No

(2/6/92)