S. HRG. 101-715

HEALTH EFFECTS OF LEAD EXPOSURE

HEARING

BEFORE THE

SUBCOMMITTEE ON
TOXIC SUBSTANCES, ENVIRONMENTAL OVERSIGHT,
RESEARCH AND DEVELOPMENT

OF THE

COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

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STATEMENT OF JOHN WEICHER, ASSISTANT SECRETARY FOR POLICY DEVELOPMENT AND RESEARCH, DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, ACCOMPANIED BY MICHAEL JANIS, GENERAL DEPUTY ASSISTANT SECRETARY FOR PUBLIC AND INDIAN HOUSING

Mr. WEICHER. Thank you, Mr. Chairman. Good morning. I am pleased to be able to appear before this subcommittee to discuss HUD's activities in regard to the area of lead-based paint. My testimony will focus on lead paint in housing. I am not here to address the other sources of lead that Mr. Kimm has discussed.

HUD has various mandates for addressing the problem of lead paint in housing. We are pursuing them actively and vigorously. The statutory requirements stem from amendments to the Lead-Based Paint Poisoning Prevention Act of 1971, amendments that are contained in the Housing Community Development Act of 1987, and the Stewart B. McKinney Homeless Assistance Act Amendments of 1988. They cover both the research area and the public and Indian housing program area. In my area, the research area, we are required to undertake a national demonstration to determine the most efficient and cost-effective methods for abating lead-based paint in housing and to develop plans to abate lead paint in both private and public housing.

In the program area, we are required to create guidelines for the removal of lead paint in public and Indian housing. That is the responsibility of Mr. Janis' office, and I may say that in the 10 months that I have been at HUD, my office and Mr. Janis' office have worked closely on our mandates, which are overlapping. We have devoted a good deal of attention to coordinating our work.

In my statement I discuss the status of the specific projects, both the research projects and the public housing guidelines. I might say simply that we are conducting abatement demonstrations in HUD-owned single family housing in five metropolitan areas. That is well under way and we expect to complete that later this year. We expect to spend $6 million on the abatement demonstration, money from the FHA Insurance Fund. This is $2 million more than we originally anticipated. Secretary Kemp has just recently notified the appropriate Congressional committees of a reprogramming request for an additional $2 million. We urge you to support us in that effort. We believe it is essential.

The purpose of the demonstration is to acquire knowledge about the cost of abatement methods, their effectiveness, and the impact on worker safety.

We have an abatement demonstration now getting under way in public housing in Cambridge, Massachusetts, Albany, and Omaha. Initial testing has begun on this. We are addressing the same issues in multi-family housing with FHA as we are in single family housing with the FHA demonstration.

We are examining lead-based paint testing technologies. That is being done for us by the National Institutes of Science and Technology. We have a report describing our progress in that area which is now being drafted which we expect to submit to the Congress later this spring.

The major finding here is not a cheerful one at this point. It is that the most popular detection technology, the portable X-ray fluorescence machine, is not as accurate as we expected. We are requiring supplementary laboratory testing for many units where we have conducted tests with the XRF machine. The additional testing is time-consuming and costly and is one reason why the FHA abatement demonstration is costing more than we originally anticipated. Part of our research effort is devoted to the possibility of developing an improved detection technology

We are developing comprehensive and workable plans for both public and private housing, which I mentioned before.

In the area of the public and Indian housing program, we have a major effort to implement guidelines for testing and abating lead-based paint. Those guidelines will go into effect by April 1st of this year. They are the result of an intensive effort which began in August, 1988, when HUD contracted with the National Institute of Building Sciences to develop the guidelines.

NIBS, under our agreement with them, convened a broad-based project committee to help them develop the guidelines, composed of public and private sector representatives, including the medical community, design professionals, product manufacturers and distributors, members of the academic community, builders, trade union representatives—everyone with an interest in lead paint in housing in America. Fifty-three people served on the project committee. The committee met through a six-month period to produce a consensus document. The guidelines were transmitted to HUD in March of last year. There was a significant dissenting minority, so during the spring and summer of last year we worked with members of both the majority and minority sides of that committee to develop a set of guidelines with which everyone could be reasonably satisfied.

Concerns were expressed by representatives of the medical community that the guidelines had high implementation costs which would result in little or nothing being done. PHA representatives felt that the document did not provide adequate guidance on how to integrate lead-based paint abatement activities with our comprehensive modernization program for public housing.

Many of the people who worked on those guidelines will be appearing before you later this morning. We worked with the best experts we could find in a variety of areas.

As a result of the revised guidelines, we will have in place on April 1st of this year guidelines covering testing, abatement, worker protection, cleanup, and waste disposal. We are working with EPA on training. We are working with other Government agencies—NIOSH, the Centers for Disease Control, the Consumer Products Safety Commission, Occupational Safety and Health Administration of the Labor Department, as well as the National Institutes of Standards and Technology and the National Institute of Building Sciences—to try to move expeditiously on this problem which we recognize, Mr. Chairman, as a serious problem in the housing stock of the United States. We are committed to respond fully to the mandates which the Congress has asked us to address.

Senator REID. Thank you very much for your testimony.

ASARCO

Robert J. Muth
Vice President
Government and Public Affairs

May 31, 1990

The Honorable Harry Reid
United States Senate
SH-324 Hart Senate Office Building
Washington, DC 20510-2803

Dear Senator Reid:

I appreciated the opportunity to testify before your Subcommittee regarding legislation to deal with certain aspects of the potential health effects of exposure to lead. As a follow-up to the hearing, you have addressed four additional questions to me. The purpose of this letter is to respond to these questions on behalf of ASARCO Incorporated, as well as to provide you with some overall views on certain legislation that is being proposed regarding lead usage.

Question 1: "The Environmental Defense Fund has made a proposal that a tax be placed on newly mined lead, both to encourage the recycling of lead and to raise money for a wide scale abatement effort. Do you have any comments on this proposal?"

Answer: EDF has asserted repeatedly that any new lead production poses unacceptable environmental and health risks. EDF's proposal that a tax be imposed on newly mined lead is plainly part of its effort to discourage, and ultimately prevent, any such new production. Indeed, the explicit purpose of EDF's tax proposal is to shut down the primary lead industry in the United States.

Asarco obviously opposes this EDF effort. First, we disagree with the premise of the EDF position -- that all new lead production will result in unacceptable environmental or health consequences -- because the available scientific and medical evidence does not support this position. Moreover, EDF's extreme position would impose significant and broadly-based economic hardships, and would impede important, beneficial, and safe uses of lead in the United States without any detectable improvement in the environmental or health effects of lead exposure.

Furthermore, while EDF's tax proposal might accomplish its intended purpose of closing down the primary lead industry, it would essentially ensure that its stated goals of encouraging recycling of lead-containing products and raising money for

leaded-paint abatement are not met. Lead is now the most highly recycled of all metals. Indeed, by far the most prevalent single use of lead today is for the manufacture of lead-acid automotive batteries, and over 90% of these batteries are already being recycled.

Asarco strongly supports legislative and regulatory efforts that address the challenge of raising even higher the percentage of batteries that are recycled. This is a sensible goal from the standpoint of resource conservation. At the same time, however, the most current scientific evidence shows that there is no significant environmental threat posed by lead in batteries and other products found in either municipal solid waste landfills or incinerator ash monofills. Studies have consistently shown that the earlier concern over lead contained in municipal solid waste was substantially overstated. Copies of three such studies are:

1. Characterization of Municipal Waste Combustion Ash, Ash Extracts, and Leachate, Coalition on Resource Recovery and the Environment (CORRE), March 1990;

2. Managing Ash from Municipal Waste Incinerators, Resources for the Future (RFF), November 1989; and

3. Characterization of MWC Ashes and Leachates from MSW Landfills, Monofills, and Co-Disposal Sites, U.S. EPA October 1987.

Asarco also supports constructive regulatory and legislative efforts in the area of lead paint abatement. Asarco believes that there is now a consensus that further research is required to evaluate the potential risks associated with deterioration of leaded paint, to develop broad abatement strategies, and to improve abatement technology. Accordingly, consideration by Congress of the funding mechanism for this effort should, we believe, take account of a number of relevant factors, such as (1) the impact of any tax upon specific industry sectors; (2) the effect of any tax on the international lead market and on the competitive position of the United States in that market; (3) the impact -- both positive and negative -- of the funding mechanism on public health and environmental concerns; (4) the reliability and adequacy of the revenue generated; and (5) the appropriate mix of different funding sources. There are obviously many approaches to be explored, and Asarco would like to participate in any effort to develop and shape the appropriate choices.

Question 2: "Why are so many smelters not in compliance with EPA regulations?"

Answer: I assume that your question is directed at the fact that emissions from lead smelters in the United States from time to time exceed the National Ambient Air Quality Standard for lead in the immediate area of stationary sources. (We are not aware of any basis for believing that primary smelters are not in full compliance with all other EPA -- and OSHA -- regulations or standards for lead.) I note at the outset that lead smelters are generally in compliance with their State Implementation Plans for lead under the Clean Air Act (I know that Asarco is). As you know, such plans, or "SIPs," rather than the ambient standard itself, are the compliance vehicles under the Act.

The ambient air quality standard for lead, promulgated by EPA in 1978, was primarily intended to assure a continuing reduction in lead emissions from mobile sources through the removal of tetraethyl lead from gasoline. At the time the standard was promulgated, EPA Administrator Costle recognized that a number of stationary sources, particularly lead smelters, would be unable to comply with their implementation plans if the plans were designed to ensure that emissions would not exceed the ambient standard at the fence line of the plants. Over the past 11 years, Asarco has worked closely with state and federal environmental agencies to develop realistic implementation plans for each of its plants, and the resulting plans have been carried out at very substantial costs to the company. These efforts have indeed resulted in significant reductions in lead emissions, and yet Asarco is still working to reduce emissions further -- chiefly "fugitive" emissions from the complex smelting process -- so as to satisfy the ambient standard at all locations in the immediate vicinity of the plants.

I am enclosing aerial photographs showing the sites at each of our three facilities.* Our Glover, Missouri smelter is located in a remote rural area, although an interstate highway passes close to the plant. Computer modeling shows that emissions from the plant may exceed the ambient standard only on a short, unoccupied stretch of the highway that passes within approximately 100 yards of the plant. Similarly, at our Omaha, Nebraska facility, air monitoring has shown that lead emissions from the plant do not exceed the ambient standard in populated areas, but rather only at one monitor located on top of a sewage pumping station located in an industrial area about 100 yards from the plant fence line. At East Helena, Montana, our air monitors have detected emissions exceeding the standard in a populated area, as indicated by the attached photograph. Over the past several years, Asarco has invested substantial amounts of money to reduce lead emissions, and most recently has constructed a new enclosed ore handling facility, at a cost of $16 million, designed to reduce emissions of fugitive dust. The new facility was dedicated last month. We expect that it will result in marked reductions in lead concentrations in ambient air.

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*The photographs referred to have been retained in committee files.

Current and projected emissions from Asarco's plants do not constitute a threat to public health or the environment. Nevertheless, we continue to work toward zero exceedances of the ambient air quality standard in the vicinity of our plants.

Question 3: "How does your smelter/s dispose of its waste?"

Answer: The principal waste produced by Asarco's primary lead smelters is lead blast furnace slag. Lead in the slag material is contained in an inert glass-like matrix which tends to render the contained metals immobile. Lead blast furnace slag is in part recycled to the sintering process for metallurgical reasons; the remainder is managed in piles on-site at the plants. Lead blast furnace slag is the subject of study by EPA to determine whether it should be regulated as non-hazardous waste under Subtitle D of the Resource Conservation and Recovery Act of 1986, as amended by the Hazardous and Solid Waste Amendments of 1984 ("RCRA") or regulated as a hazardous waste under Subtitle C of RCRA.

Further, other process-related "wastes" are generated at Asarco's primary lead plants, including lead process wastewaters.[1] Valuable lead-bearing solids are routinely separated from these process waters and reprocessed or reused at the smelter itself or at one of Asarco's other primary smelters. The solids are reprocessed through smelters for recovery of metal values, and the water is reused. These materials are not handled in a manner that would classify them as waste, and certainly retain significant value to be reprocessed within Asarco's plant system. Another example, of process-related "wastes" is spent furnace brick. This waste is recycled or reprocessed in the blast furnace to recover metal and fluxing material values.

Asarco's primary lead processing plants also generate other minor wastes such as cleaning solvents and used oils. These cleaning solvents and used oils are usually generated in small quantities and collected in containers on-site for pick-up by outside contractors such as Safety-Kleen Incorporated.

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[1]These process wastewaters were also excluded from federal hazardous waste regulations by the Bevill Amendment in 1980. However, recently, EPA has removed lead process wastewater from the Bevill Amendment exclusion, thus subjecting this material to RCRA Subtitle C regulation.

Finally, Asarco's primary lead plants generate other intermediate and in-process materials such as drosses and mattes in the smelting and refining of lead that contain valuable metals. However, most of these materials, because of their intrinsically valuable metal content, are reprocessed or reused at the smelter or at one of Asarco's other primary processing plants.

Question 4: "How often do you test the blood lead levels of your workers? What happens if you find a worker with high blood lead levels?"

Answer: In accordance with OSHA standards, blood tests are administered every six months to all Asarco employees exposed to air lead levels in excess of 30 ug/m^3. Those employees with blood lead levels in excess of 40 ug/dl are tested every two months. Any employee with a blood lead level in excess of 50 ug/dl is subject to "medical removal" (i.e., to a location of low air lead exposure). The employee is tested every 30 days until the blood lead level declines to less than 40 ug/dl, and the employee is reassigned only when the blood lead level falls to 40 ug/dl or when, after 18 months, the employee can be returned to the former job with the consent of the employee's physician after a prescribed physical examination. (Employees on "medical removal" of course retain the wage scale of the jobs from which they were removed.)

Over the past 10 years, the average blood lead level of employees in Asarco plants has declined from 43 ug/100g to below 29 ug/100g. This gratifying result has been achieved through extensive engineering controls, work practices, use of protective equipment, and careful attention to personal hygiene. At the present time, there are only two employees in all of our plants who are on "medical removal."

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In closing this letter, I would like to underscore Asarco's interest in working with your Subcommittee in drafting effective and responsible legislation. At the same time, I must emphasize our concern with the position advocated by EDF, and which to a disturbing degree is reflected in your bill.

Put most simply, it is EDF's position that because certain specific uses of lead chemicals in the past have posed environmental and public health concerns when dispersed into the environment, all future uses of lead, regardless of whether they can be shown to pose any significant environmental or health risk, should be banned or severely restricted. This position is not supported by accepted medical or scientific evidence and threatens to deprive consumers of safe and beneficial lead products. At the same time society forfeits new applications for lead which might contribute to technological innovation.

Asarco urges that lead products be evaluated under the same risk/utility analysis that is applied to other potentially toxic products under current laws designed to protect public health and the environment. One could foresee an example in which a new product with potential for significant innovation and benefit to society might be prohibited because it contained lead -- even if the use of lead were relatively benign -- while other products containing potentially toxic constituents would be subjected to a less rigorous test.

There is no basis for adopting special standards for lead that do not apply to other potentially toxic substances. If lead products are to be banned or restricted, these bans or restrictions should be supported by the rigorous analyses required by existing law.

We appreciate the opportunity to express our views on these important issues.

Respectfully,

Robert J. Muth

Enclosures

RJM/dp