Work& Health

January 6, 1994

Dr. Steven Galson, Deputy Director NIOSH 4676 Columbia Parkway Cincinnati, Ohio 45226 Occupational Medicine
Occupational Renabilitation Center
Drugs of Abuse Testing
Industrial Hygiene
Wellness / Health Promotion
CARES Employee Assistance Program
Mental Health Services
Substance Abuse Services
Emergency Services
Managed Care
Women's Services

RE:

Dear Dr. Galson:

I have noticed the request for information on incidents of family poisonings or home contaminations by substances inadvertently carried home by workers on their clothing in the November 15, 1993 <u>Federal Registry</u>.

While working in Cincinnati, I came into contact with several employees of This company was involved in manufacturing pewter objects, with apparently very poor hygiene, and with extraordinarily high levels of lead found in air sampling. The children and grandchildren of two employees were found to be heavily contaminated by lead.

I have enclosed copies of some of the home environmental sampling that I still have in my possession.

Sincerely,

R. Michael Kelly, M.D., M.P.H.

Medical Director

Occupational Health Services

RMK/smd Enclosures University of Cincinnati Medical Center

Institute of Environmental Health

Kettering Laboratory 3223 Eden Avenue Cincinnati, Ohio 45267-0056



July 21, 1987

RE: Environmental Lead Survey of Residences
Williamstown, KY 41097)

On June 17, 1987 environmental surveys of the above residences were conducted by Ms. Sheila Sistrunk, Mr. Chris Reh and myself. Both residences were well maintained. The home was a one store pre-World War II frame dwelling and the home was a relatively new mobile home.

Very high dust lead levels were found on carpets and other surfaces in both homes. A summary of the results are attached. The dust lead concentrations in the home are not what would be expected in the relatively new home that it is but rather are at the high end of the range of levels found in 19th Century homes in unsatisfactory condition.

Although lead paint was detected on some of the surfaces in the interior of the presidence, the leaded paint was not on the outermost layer and appeared to be in good (tight) condition.

Soil and exterior dust lead levels were low around the home while some areas near the home had higher levels. The highest level near the home, 598 ppm, was the only sample greater than 500 ppm which is the lowest level that has been suggested as warranting abatement.

Hand dust levels, a measure of current lead exposure, were high on both children examined.

In my judgment the high dust lead concentrations are very likely due to lead contamination brought home from a former workplace of the adults in these families, which I understand was

A thorough cleaning of surfaces, carpets and furniture in both of these homes is warranted. Enclosed are two papers which describe a cleaning procedure which has been shown to be helpful. The procedure involves two cleanings with commercial rented carpet cleaning equipment. The first cleaning involved use

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of a mixture of 1 lb. of Calgon/5 gal. of water in a Steamex carpet cleaner on both carpeted and uncarpeted surfaces. Twenty-four hours later the surfaces were then cleaned using commercial cleaning solvents in the recommended concentration.

We would be willing to perform our dust collection and analysis procedure the day after the cleaning and then after an interval of time of about one month.

Please convey these results to the families involved. They should feel free to call us if they have any questions (513-872-5784 or 513-872-7214).

Sincerely,

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Scott Clark, Ph.D. - Professor of Environmental Health

SC:jo

Enclosures

Summary of Environmental Dust and Soil Lead Levels in Residence (Environmental Dust and Soil Levels in Residence (Environme

June 17, 1987 Samples

Sample Type	Lead Concentration, Parts Per Million	
Dust on Rugs	1200 - 2500	
Dust on Other Floor Area	794	
Dust on Window Sills	10,900 - 25,100	
Soil and Exterior Surface Dust	1300 - 8200	

University of Cincinnati Medical Center



July 22, 1987

Institute of Environmental Health

Kettering Laboratory 3223 Eden Avenue Cincinnati, Ohio 45267-0056

RE: Environmental Lead Survey of Cincinnati, Ohio

On June 17, 1987 an environmental survey of the above residence was conducted by Ms. Sheila Sistrunk, Mr. Chris Reh and myself. This residence was well maintained and was a brick dwelling probably built around the turn of the Century.

Very high dust lead levels were found on carpets and other surfaces in this home. A summary of the results is attached.

Although lead paint was detected on some of the surfaces of the residence, the painted surfaces appeared to be in good (tight) condition.

Soil and exterior dust lead levels were high.

Since no children or women in childbearing age apparently reside in this home, no current threat to health appears to exist. However, a cleaning program like that recommended for your patients who reside near Williamstown, KY should eventually be performed.

We would be willing to perform our dust collection and analysis procedure the day after the cleaning and then after an interval of time of about one month.

Please convey these results to She should feel free to call us if she has any questions (513-872-5784 or 513-872-7214).

Sincerely,

Scott Clark, Ph.D.

Professor of Environmental Health

SC:jo

Attachment

Summary of Environmental Dust and Soil Lead Levels in Mentrup and Strong Residences (Route 1, Box 145, Williamstown, KY 41097)

June 17, 1987 Samples

Sample Type	Lead Concentration, Mentrup Residence	Parts Per Million Strong Residence
Dust on Rugs	625 - 5220	1480 - 7210
Dust on Other Floor Area		3710
Dust on Window Sills	1670	22,500
Dust on Auto Floor Carpet		715
Soil and Exterior Surface Dust	<17	<16 - 598

Hand Lead: 34  $\mu g$  on 11 month old. 56  $\mu g$  on 36 month old.