

Chicago Cont. (Thru. DATE January 17, 1972
 (Thru. (Thru. SUBJECT Roosevelt University Lecture
 R. K. Wolge on Lead in Paint (Part II)
 DETAILS BY

On January 12, 1972 the Roosevelt University lecture series entitled "Chemistry Applied to Ecology" featured Part II of the Lead in Paint program. This program was concerned with the analytical aspects of the problem and was presented by three speakers primarily, with miscellaneous comments by Dr. Slutsky, who, as you will remember, presented one half of the complement to this lecture on January 3, 1972. The three speakers were Mr. William Burke of the Chicago Building Department, Dr. Hyman Orbach, Director of Laboratories of the Chicago Board of Health, and Mr. Marvin Lilly (?) a chemist in the laboratories of the Chicago Board of Health.

Dr. Slutsky made the opening comments and introductions and quickly summarized the material in the last lecture.

Mr. William Burke spoke next and concerned himself with describing the functions of the Building Department as related to the lead in paint issue. He described his job as the "elimination of lead at the source", i.e. the peeling paint and plaster chips in the home environment. The building department receives referrals from the Board of Health, after the Board of Health has determined that a child (or children) in a particular residence has (have) high blood lead levels (above 35 ug/100 grams of blood). He commented that a child can stand a daily lead intake of 0.3 ug/day and that a paint chip approximately one inch square contains at least three times that level.

Mr. Burke and his group use an X-ray fluorescence analyzer to qualitatively determine the presence of lead in the interior paint of the suspected domicile. They use a Princeton Gamma Tech instrument. The group also inspects all the walls for peeling paint and plaster and sketch the interior of the dwelling with the locations of any peeling paint and plaster indicated. Samples of the paint and plaster, if they are in poor repair and are thought to contain lead, are submitted to the Chicago Board of Health Laboratories for quantitative lead analysis. If the materials are found to contain "sufficient quantitation" of lead then the tenants and landlords are notified and given 30 days to complete repairs. If this is not done voluntarily the Building Department completes the repairs and bills the landlord. Mr. Burke commented that the cost of repairs is so high in some cases that the landlord would rather evict the tenants and close the building rather than make the repairs. He also stated that the repairing of dwellings to eliminate the source is not the answer to the poisoning problem because of the expense, and that the obvious answer is a medical one - either a cure for pipe, or a cure for lead poisoning.

0007-SWP-037125

Dr. Orbach was the second speaker and concerned himself either with glorifying the Chicago Board of Health for being pioneers in the lead poisoning field, or insulting the audience with pseudo scientific explanations of the effect of lead on the metabolism of sugars, the effects of Sykic cell toxin, or phospho-d-hydrogenase deficiencies, most of which had little or nothing to do with the topic at hand. When he finally returned to the lead in paint issue he commented on the proposed ordinance before the Chicago City Council which would prohibit the sale of paints for interior use which contain more than 0.01% lead, after January, 1973. He said, with noticeable pride, that this ordinance will "break the back of the paint companies." The pride was generated because both he and Dr. Slutsky were instrumental in proposing this ordinance.

Dr. Orbach's final comments dealt with the actual analysis techniques for the determination of lead in blood, dried paint chips and plaster. The technique for whole blood is to coagulate the protein from a 2.5 cc. sample, adjust the pH of the supernatant, complex the lead with APDC (ammonium pyrrolidine dithiocarbamate), extract the APDC complex with MIBK and analyze the MIBK extract by atomic absorption spectroscopy. An analysis can be performed on the untreated blood by using the Delves open cup or the carbon rod atomizer technique and atomic absorption spectroscopy.

The last speaker was Mr. Marvin Lilly (?), an analytical chemist. Mr. Lilly described the technique used by their lab for the analysis of lead in paint chips and plaster. A 100 mg. sample of the material is finely ground and then dry ashed at 550°C. The ash is then dissolved with 1:1 nitric acid, centrifuged to remove particulates and analyzed by atomic absorption spectroscopy.

These presentations completed this lecture and the two lecture series on the lead in paint issue.

I would again like to comment on the general attitude of the speakers concerning the lead in paint issue. Both Mr. Burke and Mr. Lilly presented objective information regarding their parts in the lead program. Drs. Orbach and Slutsky presented primarily emotional information in much the same tone as a political candidate discusses an election issue. Both men displayed very hostile attitudes toward the paint industry and toward any challenges to their information. They both advocated 0% lead paints and will no doubt make this their next issue. It is also interesting to note that Dr. Slutsky is not an M.D., but a Ph.D. geographer and teaches geography at Pomona University.

0007-SWP-037126

0007-SWP-000118418

Mr. R. K. Wells
January 17, 1972
Page 3

Throughout each of these lectures, the speakers were not aware of my affiliation with K-M, but after the January 12 lecture when I was discussing the analysis of the paint chips with Mr. Lilly I gave him my name and address and immediately Drs. Slutsky and Orbach commented that they did not really mean to malign the paint industry and that the "break the back of the paint industry" comment was only a figure of speech. Dr. Orbach then extended an invitation to visit their laboratories.

Richard W. Scott, Director
Analytical Research Department


Thomas P. Carll/sc

0007-SWP-037127

0007-SWP-000118419