

DON'T SAY IT-WRITE IT

To John Dickey/Skip Trigg Location D-2083 / D-7150
From Dick Leisen Location B-6310 Phone No. 4
Subject OSHA Lead Std + Chambers Works Date

I thought you would like to see
this before our meeting
on Tues.



E. I. DU PONT DE NEMOURS & COMPANY
INCORPORATED
WILMINGTON, DELAWARE 19898

bcc: P. G. Linsen
~~J. F. Dickey~~, Legal
J. F. Morgan, Haskell

PIGMENTS DEPARTMENT
CABLE ADDRESS "DUPIGMENT" WILMDEL

March 9, 1976

Dr. Peter M. Hay
Chairman
DCMA Epidemiology Subcommittee
Sandoz Colors & Chemicals Company
E. Hanover, New Jersey 07936

organic lead pigments

Dear Dr. Hay:

Enclosed is a summary of a review prepared by J. F. Morgan for
use by the Subcommittee of references Nos. 44-47 cited by K. Kay in his
paper.

Sincerely,

F. F. Ehrich
rah

F. F. Ehrich
Technical Manager

FFE/rah

Enclosure

The references cited by K. Kay (44-47) contain reports of kidney damage in laboratory rats and in persons following administration of lead acetate and lead oxide and lead poisoning. There is no direct association with exposures to lead pigments per se.

Reference 44. Goyer, R. A. The renal tubule in lead poisoning. Mitochondrial swelling and aminoaciduria. Lab. Investigations, 19, 71-77 (1968).

In the work reported here, rats were fed lead acetate. It is erroneous to refer to this as a study of lead pigments.

Reference 45. Lilis, R., N. Gavrilesou, B. Nestoresce, C. Mumitriu, and A. Roventa. Nephropathy in Chronic Lead Poisoning. Brit. J. Indus. Med., 25, 196-202 (1968).

This study is of renal function in 102 patients with lead poisoning admitted to the Occupational Diseases Clinic in Bucharest, Rumania during a 10-year period. All had been working for several years in plants where the risk of exposure to lead or lead oxides was said to be well known. They came from "storage battery plants, lead and lead alloy foundries, terracotta enameling shops, etc."

Three workers are identified as having worked in terracotta enameling and one in minium painting. The remainder are identified as workers in welding, or in foundries, or their occupations are not specified.

In enameling the lead materials used consist of red lead, litharge, white lead, or lead sulfate. The less soluble lead pigments are not involved in the exposures of these workers.

N 30810.02

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Reference 46. Hirsch, G. H. Effect of chronic lead treatment on renal function. Toxicol. and Applied Pharmacol., 25, 84-93 (1973).

In the work reported here, rats were fed lead acetate. It is erroneous to refer to this as a study of lead pigments.

Reference 47. Cramer, K., R. A. Goyer, R. Jagenburg, and M. H. Wilson. Renal ultrastructure, renal function, and parameters of lead toxicity in workers with different periods of lead exposure. Brit. J. Ind. Med., 31, 113-127 (1974).

The subjects in this study were seven men who had been employed in ship breaking in which they had been exposed to lead oxide fume arising from the use of burning torches on lead painted steel. They had no history of inhalation exposure to lead pigments.