

Indiana Ordnance Works, E. I. Du Pont
de Nemours and Company, Inc.
Charlestown, Indiana

RE 0013567

May 21, 1954

Dr D. H. Eckles
Indiana Ordnance Works
E. I. Du Pont de Nemours and Company, Inc.
Charlestown, Indiana

Dear Doctor Eckles:

I am sending you herewith the results on the following employees, together with an interpretation of the results and an invoice covering the cost of analysis:

[REDACTED]

Very truly yours,

E. R. Brtlage, Secretary to
Dr. Kehoe

ef

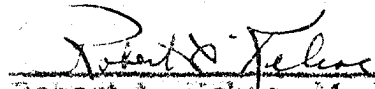
Enc.

RE 0013568

The interpretation which is attached hereto was made on a separate sheet but was worded as though the results reported were regarded as entirely reliable. This is not the case, strictly, since painters were working on the outside of the Laboratory at the time; they went through the analytical laboratories from time to time and the opening of windows, as well as the disturbances to filters and other facilities, provided opportunities for contamination of samples in process of analysis. In consequence, high results are not entirely to be trusted, while low results may be assumed to be correct, since contamination can only influence the results on the high side.

On this account it is recommended that no action be taken on any of the men whose results are high, with the exception of Grover Kisor, who should not be subjected to further exposure until the results in his case have been checked. Additional blood samples should be obtained and analysed at our expense, from all of the men. It is unnecessary at this time to reexamine the urine. We are forwarding equipment for the five additional samples.

Signed:


Robert A. Kehoe, M. D.

KE 0013569

N17481.01

Source: Employees of Indiana Ordnance Works, E.I. du Pont de Nemours and Company,
 Charlestown, Indiana

Material: Urine and Blood

Submitted: 5-11, 13-54 by Dr. D. H. Eckles, Indiana Ordnance Works, E.I. du Pont de Nemours
 and Company, Charlestown, Indiana

Required: Lead Analyses

Name	URINE			BLOOD				
	Analysis Number	Volume ml.	Mg. Pb/ Liter	Analysis Number	Spectrographic		Dithizone	
					Weight Grams	Mg. Pb/ 100 g.	Weight Grams	Mg. Pb/ 100 g.
[REDACTED]	54A-3634	118	0.23	54A-3635	Contaminated		19.7	0.11
[REDACTED]	54A-3673	115	0.15	54A-3674	8.1	0.09	17.4	0.07
[REDACTED]	54A-3636	49	0.12	54A-3637	15.7	0.06	*	0.08
[REDACTED]	54A-3638	142	0.07	54A-3639	15.4	0.08	*	0.075
[REDACTED]	54A-3675	110	0.11	54A-3676	11.1	0.07	12.7	0.06

* One tube; both analyses run from the same sample.

Samples Collected: 5-6, 7, 11-54
 Samples Received: 5-11, 13-54
 Samples Reported: 5-20-54

N17481.02

INTERPRETATION

These results, as a group, indicate clearly that these men have been engaged in work involving a significant amount of exposure to lead (one presumes, from the history sheets, that such exposure has been recent). The blood level of each of the men (average of 2 results in each instance) is above the upper normal limit, the average of all of them being 0.077. The average concentration in the urine of the group is also above the normal level, being 0.134 mg. per liter. There is, therefore, little or no margin of safety, and it is likely that the continuation of the men in the work they are doing will result in the occurrence of cases of lead poisoning, unless the exposure is reduced either by more or better environmental control or by shortening the period of exposure per day or per week.

One man in the group, [REDACTED] has reached a dangerous level of lead absorption, as indicated by the values in both blood and urine, at which he might develop symptoms of intoxication at any time. His exposure to lead should be terminated summarily, until his levels decrease. Three others, in order of decreasing severity, [REDACTED], [REDACTED], and [REDACTED], are very near the threshold of danger, while Jesse Vest alone of all the group, has a satisfactory, although, not very large, margin of safety.

Signed:

Robert A. Kehoe
Robert A. Kehoe, M. D.

See attached comments on these results

KE 0013571