

TO DISTRIBUTION	FIELD POINT OR DEPT. & BLDG. NO.	DATE YOUR LETTER
FROM J.M. GLICKMAN	FIELD POINT OR DEPT. & BLDG. NO. PEDRICKTOWN	DATE THIS LETTER 5/15/79
SUBJECT		

On March 20, 1979, an evaluation run was performed for a second teflon-treated stabilizer. The materials weighed were Tribase EXL from NL Industries (BFG Code S-67) and the teflon-treated equivalent from American Cyanamid, Cyastab 670 (BFG Code 709-895). Fifty-four batches @20#/batch of each material were weighed under conditions similar to the test performed on December 28, 1978 (report of 1/26/79 attached).

The weighman was monitored while each material was weighed, and the two samples were sent to Brecksville for analysis.

Sample No.	Material	Sample time (min.)	Exposure ($\mu\text{g}/\text{m}^3$)
299	Treated	60	1548
300	Non-treated	45	2631

The results show a reduction in exposure of over 41% for the teflon-treated stabilizer. This reduction, while sizeable, is far short of the 85% reduction in the previous run. An eight hour time-weighted average (assuming the stabilizer is weighed for the normal 90 minutes) would yield an exposure of $290 \mu\text{g}/\text{m}^3$ for the teflon-treated material, a level that exceeds the current limit of $200 \mu\text{g}/\text{m}^3$. These results highlight the importance of other controls, especially work practices, in addition to the use of treated stabilizers, in reducing exposures to toxic dusts.

JMG/re

the stb is unacceptable?

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attachment:

26184001

BFG46731

TO See Distribution	FIELD POINT OR DEPT. & BLDG. NO.	DATE YOUR LETTER
FROM J.M. Glickman	FIELD POINT OR DEPT. & BLDG. NO. Pedricktown	DATE THIS LETTER 1/26/79
SUBJECT		

EVALUATION OF "TEFLON"-COATED LEAD STABILIZERS

As part of our program to assure compliance with the OSHA Standard for Occupational Exposure to Lead, we have begun the evaluation of "Teflon"-coated lead stabilizers. A 140,000 pound run of 84059 Gray 243 was chosen for the first test. This compound contains Halbase 10, a lead stabilizer that is available in both treated and non-treated forms (BFG codes 709-881 and 709-195, respectively). One half of the run was made with each form of the stabilizer. The two stabilizers were ordered in mid December and received on December 27.

The weighing of the hand weighs was performed on December 28, under the following conditions, in order to minimize any variations not due to the stabilizer themselves.

1. All the weighing was completed on the same day.
2. One technician performed all the weighing.
3. 123 Batches at 14.3 pounds per batch of each stabilizer were weighed.
4. The weighing of each stabilizer was completed in the same amount of time.

A total of four (4) samples were taken. One sampling pump was placed on the weighman and one on top of the scale for each stabilizer weighed. When the weighing was completed, the samples were sent to Brecksville for analysis. The results were as follows:

<u>Sample No.</u>	<u>Location</u>	<u>Material</u>	<u>Exposure $\mu\text{g}/\text{m}^3$</u>
271	Weighman	Treated	100
272	Scale	Treated	30
273	Weighman	Non-Treated	680
274	Scale	Non-Treated	83

These figures represent the exposure level for the task of weighing these particular materials.

The sample time for weighing each of the stabilizers was 100 minutes. During the course of a normal day, a weighman would not be weighing lead for more than 100 minutes out of eight hours. If the results for the treated stabilizer were time-weighted over an eight-hour period (assuming no lead exposure while not weighing lead), the exposure level would drop to $21\frac{1}{2}\mu\text{g}/\text{m}^3$, which is less than one half of the Permissible Exposure Limit for the new standard.

These results indicate a sizable reduction in the exposure to the weighman, and represent an encouraging first step in the evaluation process. It must be emphasized that this test only represents a first step; and that the results will not be significant if they are not supported by additional data.

JMG/bjc

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BFG46733

26184002

TO	J. M. Glickman	FIELD POINT OR DEPT. & BLDG. NO. Pedricktown	DATE YOUR LETTER
FROM	J. A. Wallbrown	FIELD POINT OR DEPT. & BLDG. NO. Brecksville R & D Center, D/8506	DATE THIS LETTER May 4, 1979
SUBJECT			

I received 9 personal monitors with a request for analysis of lead, cadmium and antimony. The lead results are tabulated below. I regret to report that the remainder of the samples was lost during analysis and I am unable to report the results for cadmium and antimony. If further sampling is necessary please indicate that you have resampled and I will give them priority. The Log number for these samples is 94-79. The asterisk (*) involved your evaluation of teflon-treated lead stabilizers.

Sample	Date	Name	Vol. Liters	Micrograms Pb	Micrograms/M ³
315	4/09/79	Wilson	378	475	1257
316	4/10/79	"	192	425	2214
317	4/10/79	Burke	947	175	185
*318	4/11/79	Wilson	257	275	1070
*319	4/11/79	Hunter	456	375	822
*320	4/17/79	Stockwell	195	475	2436
*321	4/18/79	"	245	325	1327
*322	4/19/79	Cheesman	770	65	84
323	4/20/79	Lockwood	237	300	1266
Blank	-	-	-	-	-

Jo Ann Wallbrown
JoAnn Wallbrown

jb

cc: P. M. Zakriski
E. B. Katzenmeyer, Jr.
R & D Files

*Ed: This is
a sample of
the data
on the
lead*

26185001

BFG46734

TO	J. M. Glickman	FIELD POINT OR DEPT. & BLDG. NO. Pedricktown	DATE YOUR LETTER
DM	J. A. Wallbrown	FIELD POINT OR DEPT. & BLDG. NO. Brecksville R & D Center, D/8506	DATE THIS LETTER March 23, 1979
SUBJECT			

File

*Tom - Do we have exposure
problem with these?*

I received from you 9 cassettes. These were personal monitors for lead, antimony and cadmium. They were given Log # 57-79, and analyzed by atomic absorption spectrophotometry.

Sample	Name	Vol (M ³)	Micrograms		
			Lead	Antimony	Cadmium
286	Brown	0.123	716.7	40.0	<0.1
287	Fauntleroy	0.302	6.7	9.9	0.3
288	Kidd	0.990	583.3	33.3	0.3
289	Cheesman	0.672	883.3	16.6	0.1
290	Fauntleroy	0.326	31.6	99.9	0.2
291	Billings	0.177	116.7	9.9	<0.1
292	Billings	0.093	23.3	6.6	0.2
293	Kachiwski	0.940	110.0	326.7	0.2

Jo Ann Wallbrown
Jo Ann Wallbrown

jb

cc: P. M. Zakriski
E. B. Katzenmeyer, Jr.
R & D Files

26186001

BFG46735