STATE OF NEW YORK
DEPARTMENT OF LABOR
DIVISION OF INDUSTRIAL HYGIENE

80 CENTRE STREET
NEW YORK 13, N.Y.

ADDRESS REPLY TO:

January 13, 1964

REFER TO:

Dr. Wm. Weingarten
Medical Department
Nassau Smelting and Refining Co., Inc.
1 Nassau Place
Tohenville 7, Staten Island, New York

Dear Dr. Weingarten:

This is to inform you of the laboratory results obtained during a recent medical study of the lead exposed workers at the above plant which was conducted by members of my staff.

Attached you will find a list of the results of the blood and urine lead determinations and the urinary coproporphyrins.

The currently accepted maximum values for blood and urine lead in lead exposed workers are 0.080 mg/100 Gm and 0.200 mg/L respectively.

It is noteworthy that all but one of the elevated blood and urine levels were found in workers from 2 specific areas of the plant, namely, the cable stripping and the white metal departments, with the majority of these occurring in the cable stripping operators. These results are consistent with the elevated lead in air levels which were found to in these areas.

The following are the results of air tests taken in the various areas of the plant:

	mg.Pb/M^3
White Metal Building	
General air	0.1
Slag removed operation	6.5
Molten metal pouring	1.0
Die Casting	0.07
Travelling grate - cable sweating	0.3
Splice cutting	0.8
Cable Stripping	2.7

The accepted threshold limit value for lead in air is 0.2 mg/M^3.

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On the basis of the above, I have the following recommendations:

1. All individuals showing elevated blood lead levels should be removed from further exposure to lead until such time as their levels return to normal.

2. All individuals showing elevated urine lead levels without elevated blood lead levels should be followed closely with repeated blood and urine lead determinations.

3. The medical control program should be expanded to include periodic blood and urine lead determinations on all exposed to lead. The frequency with which these te should be performed will vary according to the degree of lead exposure in any one work situation and on the clinical appraisal of the worker.

It is understood that a medical control program must be accompanied by an effective environmental control program with its major emphasis on reducing the exposure wherever possible.

I hope this information will be useful to you. If I can be of further help, please do not hesitate to let me know.

Very truly yours,

Morris Kletnfeld
Director

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Name	Clock No.	Blood Lead mg/100 gm	Urinary Coproporphyrin	24 Hr. Urine Lead mg/Liter
[redacted]	273	0.0650	neg.	0.120
	434	0.0472	neg.	0.080
	566	0.0586	neg.	0.085
	663	0.0490	neg.	0.130
	243	0.0319	neg.	0.025
	668	0.0690	++	0.110
	676	0.0418	neg.	0.037
✓	610			
	129			
	304			
	386	0.0630	no spec.	0.070
✓	713	0.0		
	259	0.0598	neg.	0.070
	352	0.0558	neg.	0.043
	625	0.0620	neg.	0.045
	297	0.0620	neg.	0.105
✓	019	0.0817	neg.	0.164
	675	0.0725	+	0.085
✓	640	0.1410	+	0.122

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472	0.2090	—	neg.	0.365 —
563	0.0750	—	neg.	0.210 —
647	0.0320	—	neg.	0.124
367	0.0910	—	neg.	0.555 —
602	0.0807	—	neg.	0.155 —
176	0.0942	—	+	0.130
551	0.1072	—	neg.	no spec.
278	0.0815	—	neg.	0.035
262	0.0931	—	++	0.490 —
232	0.0542		neg.	no spec.
179	0.0342		neg.	no spec.
413	0.0597		neg.	no spec.
402	0.0463		neg.	0.070
450	0.0496		neg.	no spec.
681	0.0530		neg.	no spec.
383	0.0602		neg.	no spec.
320	0.0589		neg.	no spec.
289	0.0407		neg.	no spec.
203	0.0599		neg.	no spec.
128	0.0454		neg.	0.075
731	0.0504		neg.	no spec.
258	0.0761	—	neg.	no spec.
231	0.0633		neg.	no spec.
524	0.0601		no spec.	0.050
603	0.0526		neg.	0.025
132	0.0376		neg.	———
133	0.0487		+	0.130
778	no spec.		———	0.082
687	no spec.		———	0.220 —