73-23

April 12, 1973

Mr. Donald Safer
Safety Director
Cleveland Wrecking Company
1400 Harrison Avenue
Cincinnati, Ohio 45214

Dear Mr. Safer:

In accordance with your request, an evaluation of asbestos exposure was conducted at the Cincinnati Gas and Electric Miami Fort Station on March 21, 1973. Four personal samples were taken on workers who were removing insulation from a boiler. The samples were taken for approximately one-half hour. None of the workers were found to be exposed to asbestos concentrations in excess of the allowable eight-hour time-weighted average exposure of 5 fibers greater than five microns per cubic centimeter (5 fibers/cc).

The exposure to asbestos occurred when workers stripped the insulation from pipes and boilers. While one worker removed the insulation using a pick, a second man continuously sprayed the boiler with water to minimize the amount of dust generated. This operation of removing insulation is not carried out on a continuous basis. The job supervisor estimated that it is usually performed from four to eight hours per week.

The analysis of the four samples was conducted with phase contrast microscopy at the NIOSH Cincinnati Laboratory. Results are presented in Table I. The method used did not allow a distinction between fibers of fibrous glass and asbestos. Thus, the asbestos concentrations reported in Table I are a result of both asbestos and fibrous glass. They represent maximum possible concentrations of asbestos at the time of sampling, assuming no fibrous glass was present. The

presence of fibrous glass in the insulation would cause the actual concentration of asbestos to be less than those presented in Table I.

Since the four asbestos concentrations in Table I are below the Department of Labor standard of 5 fibers/cc, it is apparent that the insulation-removing operation was in compliance with respect to asbestos exposure. The fact that the operation is not continuous decreases the exposure to asbestos. As a preventive measure it is suggested that the workers continue their practice of spraying the insulation with water as it is being removed. Also, respirators should continue to be worn by workers performing this operation.

If we can be of any further assistance, please do not hesitate to contact us.

Sincerely yours,

Ronald A. Mertz
Assistant Sanitary Engineer
Industrial Hygiene Services Branch
Division of Technical Services

Enclosure

cc: PHS Region V
RAMERTZ/tc

TABLE I

Concentrations of Asbestos

Sample #	Operation	Conc. (fibers/cc)*
101	Stripping Insulation from Boiler	1.1
102	" " " "	2.0
103	" " " "	0.4
104	" " " "	0.3

*Dept of Labor Standard = $\frac{5 \text{ fibers}}{\text{cc}}$

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4676 Columbia Parkway
Cincinnati, Ohio

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16. Abstract (Limit: 200 words)

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The analysis of the four samples taken was conducted with phase contrast microscopy at the NIOSH Cincinnati Laboratory. Results are presented in Table I. The method used did not allow a distinction between fibers of fibrous glass and asbestos. Thus, the asbestos concentrations reported in Table I are a result of both asbestos and fibrous glass. They represent maximum possible concentrations of asbestos at the time of sampling, assuming no fibrous glass was present. The presence of fibrous glass in the insulation would cause the actual concentration of asbestos to be less than those presented in Table I.

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