May 22, 1964

Mr. F. C. von Mach, Export Manager
Gerard Kluyskens Company
295 Fifth Avenue
New York 16, New York (10016)

Dear Mr. von Mach:

The reference in your letter to tests made presumably in this Laboratory (so presumed because this is the only Department in this Medical College which is concerned with such matters) to determine whether certain lead-containing grinding wheels may create an hazard for workmen who employ them in grinding operations, brings to mind, at once, a matter of this type with which we have been involved, mainly in an advisory capacity, for another industrial organization. Our contribution concerned itself mainly with the determination of the size of the particles, from the aspect of their capacity for remaining air-borne and being inhaled.

We have not published anything about this specific matter (for the reason that our observations were of a contributory character to work done principally by others) but I can give you the substance of the observations (which may have been published, although when or where is not known to us, but probably will be later), and advise you as to the general characteristics of the problem. This problem is not new or unique, but is one of many of the hazardous uses of lead compounds. Antimony was not involved in the situation to which I have referred, and all I can say about it is that if it were used in sufficient amounts, it too would become a significant problem.

The facts in the situation with which we were concerned may be summarized as follows:

The use of "cut-off" wheels resulted in the contamination of the air in the vicinity of the operator of the equipment, with lead, in such form and quantity as to be definitely hazardous to the operator (or those near him) who remained at work regularly. The respirable lead in the atmosphere ranged from twice to several times the tolerable concentration.

It is obvious that the grinding equipment should be so equipped with ventilation (applied at the proper point and in the proper manner) as to exhaust the contaminated air at its source and remove it from the area. It is also evident that the manufacturers and distributors of such wheels should instruct their customers with respect to this hazard and the manner of controlling it.

It seems probable that grinding wheels vary in composition and structure, and that one cannot be certain as to the precise nature and degree of the resultant hazard. It cannot be assumed, however that they differ much in the order of magnitude of the hazard which they create, if lead and its compounds are used in their composition. Whatever doubt may exist calls for investigation, determination of the degree of hazard, and the adoption of adequate measures of control.

If we can be of service to you in this connection we shall be prepared to hear from you further.

Very truly yours,

RAK:vr

Robert A. Kehoe, M.D.

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GERARD KLUYSKENS COMPANY

295 FIFTH AVENUE
NEW YORK 16, N.Y.

ABRASIVES

Established 1912

May 14, 1964

College of Medicine,
University of Cincinnati,
Cincinnati, Ohio.

Dear Sirs:

We understand that you have been conducting tests in order to determine whether chemical combinations of lead and antimony, i.e., lead and antimony chloride, sulfide, sulfate, etc., when used as fillers in resin bonded grinding wheels will result in health hazards either to the workers who assist in the manufacture of these wheels or to the workers who handle these grinding wheels in operation.

We also understand that a write-up on this subject appeared in one of the American journals.

We should very much appreciate if you would kindly inform us about the outcome of your investigation and if you would also let us know where we might obtain a copy of the magazine article in question.

Permit us to thank you in advance for your courtesy in this matter.

Thanks very much in advance.

Yours very truly,

GERARD KLUYSKENS COMPANY

FC von Mach

Export Manager

FC von Mach/kjl

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