

May 27, 1964

Mr. O. Hällström
Rudbecks väg 20
Sollentuna, Sweden

Dear Mr. Hällström:

Someone has been giving out misleading information about an investigation which we are supposed to have made into the hazards associated with the use of certain grinding or "cut-off" wheels containing lead and certain other minerals. What we have done, was to carry out a few analyses of particulate material removed from the air in the vicinity of some such wheels to determine the quantity and the physical state (with respect to the size of the facilities) of the lead therein. We have no information on any other substance that may have entered into the composition of such wheels. In short, our contribution to this matter was a bit of helpful collaboration. If there is to be a publication - and there may well be - we may be mentioned, but we shall not be responsible in any way for the character of the article.

I can give you the substance of the observations to which we made some contribution. The use of the wheels in this instance (I have no knowledge of the extent of the variation in the fabrication of such wheels by various manufacturers, or whether these were like those in common use or whether they were unique), resulted in the contamination of the air with lead in the vicinity of the operator, to such an extent (in quality and quantity) as to be definitely hazardous to any operator who might engage in such work regularly. The respirable lead in the atmosphere ranged from twice to several times the tolerable concentration for men who are employed in contaminated areas for approximately 40 hours per week.

I have no doubt that particles of other substances, as antimony or free silica, would also be torn from the cutting surfaces of these wheels while they were being used in their abrasive capacity, to be dispersed in the air in the vicinity of the operators. The existence of hazard would depend, of course, on the composition of the wheels, and upon the manner in which they are used. Unless such wheels from various manufacturing establishments tend to be fairly uniform in their composition and use, each brand would have to be tested in use, in order to establish the nature and the degree, if any, of the hazard associated with its use.

It is quite clear to us, from what little we know about the situation generally, that these wheels may give rise to serious occupational hazards, and that they should be subjected to investigation. Some of them, perhaps all of them, will have to be equipped with suitable ventilatory devices (that is, the air bearing particulate lead in potentially dangerous con-

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centrations, will have to be exhausted at its point of origin, and so removed from the area and collected).

The manufacturer of such equipment is clearly responsible for knowing the nature and extent of the hazard associated with the use of his equipment, for providing the means of controlling the hazard, and for warning his customers as to the precautions to be taken in controlling it.

I regret that I cannot comply with your request to send you a report of the results of an investigation. If we had conducted such an investigation, I would be pleased to send you the full report, for we should have gone into it thoroughly and therefore would have had information concerning specific conditions. Having only a few bits of fragmentary information, we are in no position to say more than I have indicated above.

Very truly yours,

RAK:vr

Robert A. Kehoe, M.D.