MINNESOTA MINING AND MANUFACTURING COMPANY

GENERAL OFFICES • 900 BUSH AVENUE • SAINT PAUL 6, MINNESOTA • TELEPHONE PR. 6-8511

MEDICAL DEPARTMENT - INDUSTRIAL HYGIENE
CENTRAL RESEARCH DEPARTMENT

2301 HUDSON ROAD
ST. PAUL 19, MINNESOTA

December 6, 1961

Copy given to Dr Miller for his file
SS.
January 31, 1962

Robert A. Kehoe, M.D.
The Kettering Laboratory
College of Medicine
Eden and Bethesda Avenues
Cincinnati 19, Ohio

Dear Dr. Kehoe:

Thank you for your letter of November 21 concerning the results of our blood lead analyses. I have delayed writing to you until all of the analyses in this current series of sixty from our St. Paul operations had been received.

We are very gratified to learn that none of these sixty employees has an occupational exposure to lead to any significant degree. This confirms the effectiveness of our industrial hygiene and safety precaution in protecting the health of our employees. Most of the employees in this group of sixty are employed in laboratory research or small scale pilot plant work on intermetallic compounds. The predominant compound involved here is lead telluride. Their work involves such things as crushing, melting, grinding, and brazing. The primary route of exposure is inhalation of either dust or fumes which we try to control not only by ventilation but in certain steps respiratory protection as well. It appears that our control has been effective during the last six months. These men are checked every six months for lead absorption. In the past, this has been by urinary lead analysis, although, now we are looking forward to the privilege of utilizing the services of your laboratory for blood analyses. Once a year they are seen by our physician, Dr. Tiffany, at which time hematology, urine analysis, and a chest X-ray are conducted.

Four of the employees in this last series are from our maintenance staff, assigned to plumbing and pipe fitting. During the course of a month, they may spend up to twenty or twenty-five hours fitting lead piping which involves the use of a high temperature oxy-hydrogen torch. It is not usually practical to provide exhaust ventilation for these

N 7468

people and they find it extremely inconvenient to wear respiratory protection in addition to the usual protective mask. This is our first examination of these employees and we are very pleased to learn that there is no difficulty with them at the present time. When Dr. Tiffany has had an opportunity to review your blood analyses in conjunction with his other findings, a decision will be reached as to whether we should check these men frequently or if once a year will be sufficient.

We are glad to find that you place as much importance on the need for maintaining the strictly confidential doctor - patient relationship for these routine analyses. It was for this reason that we originally raised the question in my letter to Dr. Imbus of November 15. In the past, a coding system had been essential since the analyses were conducted in our own laboratory by analytical chemists and the results were reviewed by me. My reports have been directed to Dr. Hartfiel and to the examining physician, with copies going to the nurse involved as well as to the supervisor of the employees and to our Insurance Department. These reports have generally stated that numbers so and so are well within limits and give no indication of unusual exposure. When an employee's data are out of line, this is, of course, called to the attention of the physicians and an appropriate recommendation is made. This recommendation may consist of simply requesting a second sample or it may be to remove the employee from his work exposure until such time as the data are back within acceptable limits. Since these data may be handled by several lay people, including secretarial personnel, we have found the coding system to be most effective and does permit rapid action when necessary. We have found that the non-medical personnel involved in this system of communication have been quite discreet in the past, and they, as well as the patient and the company, are further protected by means of the coding system. We have not experienced any rumor problems since these data are never made available to the employees involved as a group and are normally only revealed to the individual employee through a discussion with the physician. In an organization as large and geographically complex as ours, it becomes almost essential to utilize the services of non-medical personnel, such as myself, in processing data of this sort. Consequently, since you have no objection we will institute a coding system for these samples and will be glad to provide you with a confidential list relating the code numbers to the employees if you so desire. If you feel that you should report your analyses on these coded samples to a physician, then I would like to repeat my suggestion in my letter of November 15 to Dr. Imbus that all of your analyses, regardless of the origin of the sample, should be reported directly to W. F. Hartfiel, M.D., our medical director, at the main offices, 900 Bush Avenue, St. Paul 6, Minnesota. This will be entirely satisfactory with us if you would prefer to handle the matter in that manner.

You will shortly be receiving, if the samples have not already arrived, several specimens from our plant at Guin, Alabama. The exposure of these employees was described, in some detail, in my letter of October 18 to Mr. Cholak and was discussed, in some detail, with him at the Pittsburgh meeting. Our past experience with these employees has been based upon urine analyses for lead. At one time, we conducted periodic checks on all employees in this operation, but, after accumulating data for some time, we reached the decision to only check those with certain specific job classifications. These job titles were reported to Mr. Cholak in my letter of November 22. If you would like more information on these, we will be glad to supply it. We anticipate that, from time to time, these men will show elevated leads and may, on occasion, crowd over the tolerance limits. In the past, these personnel have been checked monthly by urine analyses and it is our intention to continue checking these monthly, using your facilities, with blood specimens.

I would like to take this opportunity to emphasize that we consider it a privilege to be able to utilize the services of the Kettering Laboratory and its excellent staff in continuing our program of the surveillance of the health of our employees. We have no intention of misusing this privilege by wasting your time or our money on inconsequential work. We particularly appreciate your raising these questions and providing us with an opportunity to discuss them frankly and openly with you. We sincerely hope that this type of a relationship will continue as we are desirous of providing our employees and our company with the best possible health protection facilities.

Sincerely yours,

Ralph C. Wands

Ralph C. Wands,
Industrial Hygienist

RCW:amn

cc: W. F. Hartfiel, M.D.

November 21, 1961

Mr. Ralph C. Wands
Industrial Hygienist
Minnesota Mining and Manufacturing Company
Medical Department - Industrial Hygiene
Central Research Department
2301 Hudson Road
St. Paul 19, Minnesota

Dear Mr. Wands:

I am writing again, after having seen your letter of November 15th to Dr. Imbus, and having examined the analytical results obtained thus far in the analysis of samples of the blood of employees of your Company.

A second series of results has been reported to you, and I enclose herewith two copies of a third report. This last series, as well as the other two, without a single exceptional result, represents the findings that are to be expected in an analytical survey of a group of men who have not been subjected to occupational exposure to lead for some time.

It is for this reason that I write to you, for while I am entirely willing to work with you in the investigation of your lead problem, in such a manner as to reach a satisfactory solution of it, I am unable to perceive the relevance of the determinations made thus far.

It was my understanding that your Company is conducting an operation which appears to be potentially hazardous, and that you wish to find out the facts in that regard. I made certain recommendations as to the initial approach to this matter, and I fully expected to see some evidence of occupational absorption of lead. I have no intention of withdrawing our help, but I would consider it advantageous to be let in on what you are undertaking to do. As I have indicated previously, we have no interest whatever, in carrying out analyses unless there is a useful purpose to be pursued, and unless such purpose can be served in the most effective manner. I believe we are in position to determine what is the most effective approach, and I should like to be certain that we are providing you with the maximum amount of information at the least cost in our effort and your expenditure.

With respect to the reporting of the information, we shall be pleased to report on findings in the manner which is desired. It is my view, as the result of long experience in this field, that results which

demonstrate the existence of danger to a man or men should be reported only to physicians with recommendations concerning the disposition of the men so involved. This is a medical problem, involving medical and legal responsibility. The improper dissemination of such information may lead to serious difficulties and to medico-legal problems that can be very troublesome but also can readily be avoided. We can and will make use of a code, but the people involved in this will learn quickly to recognize results which denote danger regardless of names, and there will be - or is likely to be - talk. It is better technique to handle these data in the precise manner that medical records are dealt with - as strictly confidential information. So long as everything in them is normal, no problem is likely to arise, but the moment some of the results are indicative of danger, the way is open to trouble, and discreet and professional handling is required. A sample of blood from a man is a part of his body. It is as important in the eyes of the law as is any other part of him, and so it deserves respectful and strictly professional treatment.

I hope I am not being even slightly offensive in calling attention to these matters, but I should be less than honest and responsible if I were to hold my peace and hope for the best.

Sincerely yours,

Robert A. Kehoe, M. D.

RAK:ss

Enclosure

cc: W. F. Hartfiel, M.D.
Lee H. Miller M.D.