



University of Pittsburgh

GRADUATE SCHOOL OF PUBLIC HEALTH
Department of Industrial Environmental Health Sciences

May 18, 1978

Dr. J. Kastner, Chief
Environmental Standards Branch
Office of Standards Development
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Dr. Kastner:

This is in reference to a communication that was brought to my attention yesterday May 17, 1978, by someone at the university. This was a form notice of modification of a "request for proposal" which had been sent out or made public pertaining to the statistical analysis of the Hanford employee death data which was being solicited. This surprised me for several reasons.

Subsequent to March 16, 1978 when I received a letter from you informing me that the "Nuclear Regulatory Commission is issuing a request for Proposal (RFP) to obtain multiple independent analysis of the Hanford mortality data," I telephoned you and advised you of the following:

That the Department of Energy had previously contracted for and paid substantial funds for the statistical analysis of the same Hanford employee death data, to the Battelle Northwest Laboratories, Richland, Washington; had arranged and contracted with independent consultants at various organizations to conduct such analysis, specifically Dr. Brian MacMahon and Dr. George Hutchinson of Harvard University; Dr. Charles Land of the National Cancer Institute; Mr. Seymour Jablon of the National Academy of Sciences. In addition I believe arrangements were made with representatives of the Oak Ridge Associated Universities in Oak Ridge to review and conduct data analysis.

I stated at that time, that in view of the substantial funds, time and effort, already expended by other governmental agencies for the same purpose by the Department of Energy to organizations and consultants that the Department of Energy thought were highly qualified, the National Regulatory Commission idea to request the same statistical analysis could be considered by the public as an unjustified expenditure of funds.

I do believe that if the Nuclear Regulatory Commission had concluded in March 1978 that the Department of Energy Consultants and the statistical analysis carried out were not satisfactory and therefore that a new statistical analysis was required, then it would have been appropriate for the Nuclear Regulatory Commission to state such reasons as well as to make available the

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evaluation of the documents which brought about that conclusion. I do know that the Nuclear Regulatory Commission has previously requested the Department of Energy to keep you informed of all statistical analysis on the Hanford death data so I presume you obtained the Department of Energy documents in March, upon which you made your conclusion to get additional statistical analysis.

Within this context, as I looked at the notice yesterday of the technical description of the characteristics and type of statistical analysis required in the Nuclear Regulatory Commission (RFP), I was astounded at the absence of any mention of internal radiation. I consider this a serious error not to recognize the importance of internal radiation as a factor to be controlled in such statistical analysis, and I wish specifically to call this to your attention.

In the article published in the "Health Physics Journal" (November 1977), the analysis conducted by Dr. Alice Stewart and George Kneale, Table 26, the importance of controlling for internal radiation is clearly demonstrated. In our analysis of the data, a high correlation between exposure of the workers at Hanford (the plutonium facility) to both external and internal radiation is clearly established. In essence any statistical analysis which does not recognize this can lead to misinterpretation of the data or misleading results.

The absence in the Nuclear Regulatory Commission statistical plan for identification of internal radiation, in the Hanford statistical analysis, does indicate at least to me, that there is a lack of appreciation by the Nuclear Regulatory Commission of the importance of the knowledge and understanding of the data. It is quite obvious that those who do not have the same depth of knowledge of the data, as we who developed the data, may carry out statistical analysis which have no real meaning, regardless of how impressive the report appears.

Actually, the type of statistical analysis that you propose in your "solicitation to all", by June 2, has already been done by us, but in addition the statistical analysis was carried still further ahead and included internal radiation as a control factor. That report prepared by Dr. Alice Stewart and George Kneale was presented at the International Atomic Energy Meeting in Vienna in March 13-17, 1978. I am enclosing two copies of that report. (Note Table I pertaining to internal radiation.)

Since that type of statistical analysis on external radiation, has already been completed by us, beyond even your solicitation proposal, and is readily available to you, I do not believe it is appropriate for us (or anyone else) to seek funds for work already done. I would suggest instead that the Nuclear Regulatory Commission give primary emphasis to internal radiation in the statistical analysis in any study funded. If this is done, depending upon the circumstances, then I could consider such a proposal.

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However, I have strong reservations about the propriety of the Nuclear Regulatory Commission conducting research work on health effects of radiation.

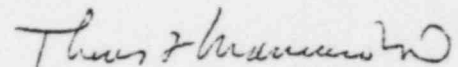
The second major point that I made in my discussion with you on the phone in March was that I was using my own data which I had developed in a more advanced state as the basis for my own research grant proposals, seeking funds because of the termination of the research grant by the Department of Energy. Although the reasons for the termination presented by the Department of Energy officials at the Congressional Hearing before Congressman Paul Rogers, chairman, on February 8 and 9 were found to be invalid, nevertheless, it is necessary for me to seek support from other sources.

The point I made to you was that the uniqueness of my data in its advanced state of development represented my means for applying for a research grant from other sources; that I would not want to be deprived of my own possibility of continuing the research I began and worked on for 13 years because you would like to obtain and give away my additional unique resource to others.

You acknowledged and agreed with me that this point I made to you was valid and quite understandable.

Consequently, the other purpose of this letter is to formally remind you what I clearly told you on the phone in March 1978, that I would retain my unique source so that I could apply for research funds. I know that you can appreciate this and I am mentioning it in this letter, again, in order to avoid any subsequent misunderstanding.

Sincerely,



Thomas F. Mancuso, M.D.
Research Professor

TFM/kp

Enclosures (2)

cc: Senator Gary Hart
Senator Abraham Ribicoff
Congressman Tim Lee Carter
Congressman Paul Rogers
Congressman John D. Dingell
- AAAS Committee on Scientific Freedom