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1. G. Failla
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March 15,1944

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FOLDER March 1944

Dr. G. Failla,
Columbia University,
Department of Radiology,
Radiological Research Laboratory,
630 W. 168th St.,
New York, N.Y.

Dear Dr. Failla:

We were indeed sorry that you couldn't come out to the recent meeting in Chicago when we were discussing our plans and going over what had been accomplished in the last month. However, you probably have been informed of the liklihood of a meeting in Rochester on April 6th and 7th, the meeting on the 7th having to do with radio-biology. I will hope to see you and hear of your plans at that time.

One of the things that I had hoped to talk to you about at Chicago was a question of the hazards of the alpha emitting product which has a half-life of 2.4×10^4 years and alpha particles with about 5 Mev. energy. So far as present indications show this material is going to behave somewhat like Zirconium, that is if it gets into the lungs it will be absorbed very, very slowly and remain in large amounts for long periods of time. Thus, there will be the possibility of continuous alpha radiation in the lungs and the question comes up as to how much of the material can be breathed. It is almost a question of total additivity, since the amount retained by the lungs will probably remain there indefinitely. In the G.I. tract the material passes through without absorbtion. What does get into the body will probably go largely to the bones, so we have again the problem of quantities in the bones that will be dangerous. There is no other known radiation than the alpha radiation. I wanted to talk this question over with you but I would appreciate anything that you feel you can write to me in regard to what you would consider a dangerous amount in the lungs or in the bone and what would be a dangerous amount in the air that would cause the deposit in the lungs.

I hope that you are again back on your feet and that everything at the Laboratory is moving along smoothly. Give my best regards to Mrs. Quimby.

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DATE 8/2/62 T
For The Atomic Energy Commission
Edgar J. Murin for the
Chief, Declassification Branch

Yours sincerely,

Robert S. Stone

Robert S. Stone, M. D.

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