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This document consists of 1 page  
Number 3 of 6 copies, Section A.

DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
SINGLE REVIEW AUTHORIZED BY: <i>DOE/HC/100 App 11/14</i>	DETERMINATION (CIRCLE NUMBER(S))
REVIEWER (ADD):	1. CLASSIFICATION RETAINED
NAME: <i>AC</i>	2. CLASSIFICATION CHANGED TO:
DATE: <i>5/16/96</i>	3. CONTAINS NO DOE CLASSIFIED INFO
	4. COORDINATE WITH:
	5. CLASSIFICATION CANCELLED
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	7. OTHER (SPECIFY):

February 18, 1947

**CLASSIFICATION CANCELLED**

DATE *5/13/74*  
For The U. S. Atomic Energy Commission  
*J. H. [Signature]*  
Division of Classification

Dr. Norris E. Bradbarry  
P. O. Box 1663  
Santa Fe, New Mexico

Dear Dr. Bradbarry:

Dr. Wright Langham and Dr. Samuel Bassett were discussing with me today the technical details relative to writing the report of the cooperative study which has been carried out at Los Alamos and at Rochester under their direction. I am enclosing the title and credit page and the table of contents. They are entirely satisfactory with me, providing they meet with your approval.

The question was raised as to how it should be circulated and from where it should emanate. It was my suggestion that it be released in two ways: (1) emanating from the Los Alamos Laboratory as a special report, and (2) included in the Special Problems Volume of the M.P.T.S. (Classified) from the Rochester Project. I am also submitting this suggestion for your consideration.

There is one limitation which I should like to impose on the report which will emanate from the Los Alamos Laboratory and that is that it not be declassified for general distribution outside the Atomic Energy Commission without our foreknowledge. I make this suggestion because of possible unfavorable public relations and in an attempt to protect Dr. Bassett from any possible legal entanglements.

I should very much appreciate your comments on the points which I have raised and should welcome any suggestions which you might care to make. It is my feeling that this is a very fine piece of work and is one which will be of distinct value to the Atomic Energy Commission. I wish to take this opportunity to thank you for the splendid cooperation which you and Dr. Langham have rendered in this enterprise.

Very sincerely yours,

Andrew H. Dowdy, M.D., Director  
Manhattan Department

AHD:JW  
CC: *Dr. Langham*  
*Dr. Bassett*  
Roch. Sub-Office, A.E.C.

Enc.: Title & Credit Page, and Table of Contents  
Copy #5 of 6A - Letter to Dr. Friedell

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N. E. Bradbarry, Director of Los Alamos Scientific Laboratory  
Andrew H. Dowdy, Director of Manhattan Department,  
The University of Rochester

EXCRETION OF PLUTONIUM ADMINISTERED INTRAVENOUSLY TO MAN. RATE OF EXCRETION  
IN URINE AND FECES WITH TWO OBSERVATIONS OF DISTRIBUTION IN TISSUES.

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(Outline of Report)

EXCRETION OF PLUTONIUM ADMINISTERED INTRAVENOUSLY TO MAN. RATE OF EXCRETION IN URINE  
AND FECES WITH TWO OBSERVATIONS OF DISTRIBUTION IN TISSUES.

I. Introduction

II. Methods

A. Clinical

1. Selection of patients
2. <sup>management</sup> ~~Handling~~ of patients
  - a. Control period
  - b. Observation period
  - c. Routine tests
    - (1) Blood tests
    - (2) Urine and kidney function tests, etc.
  - d. Collection and preservation of samples (blood feces and urine)
3. Method of Administration of Plutonium
  - a. Preparation and nature of solutions
  - b. Choice of size of dose
  - c. Technique of Injection
    - (1) Discussion of actual injection procedure
    - (2) "Dummy" injection for evaluating amount of plutonium given.

<sup>Chemical</sup>  
B. ~~Clinical~~ Methods

1. Blood analysis
2. Feces analysis
3. Urine analysis
4. Tissue analysis

III. Description of Subjects (case reports). Short paragraph about each of 12 subjects giving

- A. History
- B. Physical
- C. Laboratory
- D. Diagnosis (if known)

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IV. Results

- A. Concentration of Plutonium in blood following intravenous administration as  $\text{Pu}^{+4}$  Citrate.
- B. Excretion of Plutonium in the urine following intravenous administration as  $\text{Pu}^{+4}$  Citrate.
- C. Excretion of Plutonium in feces following intravenous administration as  $\text{Pu}^{+4}$  Citrate.
- D. Deposition of Plutonium in tissues following intravenous administration as  $\text{Pu}^{+4}$  Citrate.
- E. Clinical Results

V. Discussion and Conclusions

- A. Correlation between blood concentration and urinary and fecal excretion of Plutonium.
  - 1. Possible significance of one abnormal case.
- B. Half-time of Plutonium in the body.
- C. Choice of urinary excretion value for diagnosing Plutonium exposure by urine assay.
- D. Discussion of results in relation to tolerance amount of Plutonium in the body.
- E. Discussion of results in relation to Chicago and California experiments of man.
- F. Discussion of results in relation to experiments on mice, rats and dogs.

VI. Summary or Abstract