

Fort Detrick Radioisotope Committee

Minutes of Annual Meeting

8 March 1966

1. The committee convened at 1000 hours, 8 March 1966 in the Conference Room, Building 360.

2. Members present were:

Dr. J. B. Bateman, Chairman  
Dr. D. S. Cavanaugh  
Mr. H. Shen  
Dr. A. G. Redun  
Mr. G. C. Meyer, Secretary & Radiation Protection Officer

Members absent were:

Dr. P. J. Kadall  
Mr. C. A. Glick, Asst. Secretary & Alt. Radiation Protection Officer (on TDY)

3. The purposes of the meeting were:

- a. To review activities involving radioisotopes at Ft. Detrick.
- b. To discuss activities concerning radioactive equipment and material at Ft. Detrick.

4. Mr. Meyer reported the following:

a. Waste Collection from U.S. Army Medical Unit

A meeting was held with Lt. Col. Beisel concerning the procedure for waste collection from the Medical Unit. With each collection of waste, we now receive a DF stating that they are transferring the listed radioisotopes from their license to ours. A list of the radioisotopes, amounts, and form (burnable, non-burnable, liquid, etc.) is included. The person receiving the waste signs and dates a copy of the DF, acknowledging receipt of the material. The material is then under our jurisdiction and is under our license.

b. Transportation of Radioisotopes

During the past year, several meetings were held between Messrs. Meyer and Glick (IH&S Safety Office) and Messrs. Pease and Willard (Transportation Division) concerning the proper procedures for off-post

transportation of radioisotopes in compliance with Atomic Energy Commission, Department of Army and Interstate Commerce Commission regulations. All transportation off post is handled by Transportation Division, utilizing drivers from MD Division who are trained in transporting hazardous materials. Two vehicles were equipped as required by ICC.

c. Proposed  $\text{Co}^{60}$  Source for High Dose Irradiation

A committee consisting of Mr. Eger Scherff, Dr. Jerry Tulis, Dr. Milton Gordon, and Mr. George Meyer met twice concerning a source for high dose irradiation. Dr. Tulis sent to various companies for information on the size and type of sources available. Mr. Scherff initiated a survey to find a location in an existing building that could be utilized with a minimum of modification. Dr. Tulis initiated a survey of various elements of Bio Center to determine the potential uses and sites. Due to a lack of interest and unavailability of a suitable site, the project was tabled until a need exists.

5. Dr. Tulis had contacted Mr. Meyer and reported that Methods in Immunology, Campbell, et al, W. A. Benjamin, Publishers, N. Y. 1963, p. 90-91, recommends that personnel doing iodinations with I-131 take 2 Sodium Iodide tablets 5 gr., enteric coated, 1 hour before labeling. Dr. Tulis asked for a recommendation from the Committee as to the feasibility of the procedure here at Ft. Detrick. Dr. Madam recommended that a copy of the article be sent to Dr. Kodall for comment and advice; seconded by Dr. Bateman.

6. With the death of Dr. Dudley Glick, the Radioisotope Committee is composed of seven members. At the 1963 annual meeting, Mr. Meyer was instructed to select potential candidates for membership on the committee. At this meeting Mr. Meyer proposed Dr. Jerry Tulis. The committee voted to invite Dr. Tulis to be a member. Dr. Tulis was contacted by Mr. Meyer and accepted.

7. Mr. Meyer mentioned that the Ft. Detrick Radiological Society Manual, which was published in December 1963, will be revised this Fall. If you have comments or changes, please contact Mr. Meyer. A draft of the revised Manual will be distributed to the committee for comment.

8. Dr. Bateman was re-elected Chairman of the Committee for the coming year.

9. Mr. Meyer was instructed to prepare a DF to the Commanding Officer requesting the appointment of the Radioisotope Committee by Special Orders.

10. A report of the activities of the Radiation Protection Officer for 1964 and 1965 is attached. This report indicates the increased use of radioisotopes during the past year.

11. The meeting adjourned at 1:30 hours.

GEORGE C. MEYER  
Secretary

**Report of Radiation Protection Officer for CY 1964 & 1965**

	<u>1964</u>	<u>1965</u>
<b>1. Shipments of radioisotopes received</b>		
Total	22 shipments/35 items	57 shipments/65 items
P-32	50 mc/5 items	720.2 mc/17 items
C-14	4.85 mc/15 items	3.65 mc/35 items
I-131	38 mc/14 items	117.7 mc/10 items
I-125		15 mc/2 items
<b>2. Shipments of radioisotopes sent off post</b>		
	0	1
<b>3. Waste disposal</b>		
No. of trips to Edgewood Arsenal	5	6
No. 30 gal drums solid burnable waste	41 mixed	40
No. 30 gal drums solid non-burnable waste		17
Liquid waste	195 gal	140 gal
No. 5 gal containers animal carcasses	123	217
<b>4. Number of surveys during year</b>		
Total number of wipes taken	122	322
Vehicle clearances issued	1523	3595
	55	121
<b>5. Number of approved programs - total</b>		
" " " " " active	14	29
" " " " " active	10	18
Number of approved radiation labs	10	14
" " " " " - active	8	8
<b>6. Approved programs</b>		

Note: First two digits indicate year approved, e.g. 63-17 indicates this was 17th program approved by Radioisotope Committee in CY 1965.

Prog. No.	Isotope	Bldg. No.	Investigator	1964	1965
62-1	C-14	540	C. Leonard	Active	Closed
62-3	Ra-226	525	G. Randall, Sealed Source	Active	Active
63-2	Kr-85	470	J. Lemp, Sealed Sources	Active	Active
63-3	C-14	560	K. Eversay - 64 K. Higuchi - 65	Active	Inactive
63-4	I-131	560	J. Gruber	Active	Active
64-1	P-32	560	M. Mendelson	Active	Closed
64-2	C-14	560	D. Cavanaugh	Active	Active

Proj. No.	Isotope	Bldg. No.	Investigator	1964	1965
64-3	S-35	539	E. Schantz	Inactive	Inactive
64-4	S-35, C-14		E. Schantz		
	H-3	539, 560	W. Hoessler	Inactive	Inactive
64-5	C-14	1301	F. Abeles	Active	Active
64-6	C-14, P-32				
	S-35, H-3	1301	W. Hurtt	Active	Active
64-7	C-14	560	D. Bates	Inactive	Inactive
64-8	C-14	560	R. Brubaker	Inactive	Inactive
64-9	C-14	538	J. Balldewicz	Active	Inactive
65-1	C-14	538	E. Schantz		Inactive
65-2	H-3	525	C. Huston, Sealed Source		Active
65-3	P-32	560	F. Tyeryer		Active
65-4	C-14	1301	F. Abeles		Active
65-5	P-32, S-35	560	I. Goldberg		Active
65-6	C-14, H-3	467	D. Fish		Inactive
65-7	I-125	538	D. Berg		Active
65-8	P-32	1301, 567	R. Scherff		Active
65-9	P-32	1301, 1412	R. Scherff		Active
65-10	C-14	539	E. Zebowitz		Active
65-11	P-32	539	G. Meyer, M. Barbeito		Inactive
65-12	I-131	560, 538	J. Gruber, E. Schantz		Active
65-13	C-14, P-32				
	S-35, H-3	539	W. O'Malley		Active
65-14	P-32	539	F. Heydrick		Active
65-15	P-32	1301	F. Abeles		Active
65-16	C-14	560	M. Stein		Inactive
65-17	I-131, I-125	560	J. Taitz		Inactive

Fort Detrick Isotope Committee  
Minutes of Meeting  
26 January 1965

1. The committee convened at 1000 hours, 26 January 1965 in the conference room, Building 560. Those present were:

Dr. J. B. Bateman, Chairman  
Dr. P. J. Kadull  
Dr. D. S. Cavanaugh  
Dr. A. G. Wadum  
Mr. M. Shon  
Mr. G. C. Meyer, Secretary and Radiation Protection Officer  
Mr. G. A. Glick, Asst. Secretary and Alternate Radiation  
Protection Officer

The purposes of the meeting were:

- a. To review activities involving radioisotopes at Fort Detrick.
- b. To inform the committee of the proposed future activities concerning radioactive equipment and material at Fort Detrick.

2. The committee suggested that the secretary and assistant compile and submit a list of candidates from which additional members of the Isotope Committee might be selected. The list will be submitted to Drs. Bateman and Cavanaugh for consideration. It was agreed that the committee should not be too large. Between seven and ten members, including the Radiation Protection Officer and Alternate, were thought to be suitable.

3. Messrs. Meyer and Glick reviewed progress and programs of the past year as follows:

a. Programs

There are fifteen programs on file of which 7 are currently active and 8 inactive. Three programs were discontinued in 1964. See Appendix A for listing.

b. AEC License

License Amendment #8 was approved 8 July 1964 by AEC and received by Radiological Safety in September 1964. See Appendix B for listing of radioisotope possession limits and projected changes for renewal of license to be submitted in March 1965. Present license expires 31 August 1965, however, AMC required application be in their office 115

days prior to expiration (AEC Reg. 385-9). Therefore, work on the personnel application must be started immediately.

c. AEC Inspection

Mr. Hyder, AEC inspector, reviewed our records for compliance with the provisions of our license. He found a few record-keeping discrepancies prior to 1963, particularly as to wipe tests of sealed sources. There is no suggestion that the tests were not conducted as required, but that the data was not properly identified in the files. These tests are now being properly identified and recorded. The letter received from AEC was circulated to the Isotope Committee and a copy was forwarded to Safety Office, Edgewood Arsenal in accordance with their written request.

d. Waste Collection from U.S. Army Medical Unit (WRAMC)

A point was brought up by the AEC inspector on his visit. We are supplying WEMU with waste collection service. They operate under the license of Walter Reed Hospital in Washington and we have no jurisdiction over them. AEC inspector stated that in providing them waste service, we are in essence transferring the isotopes from their license to ours and not as we had thought, holding it for them under their license.

The committee recommended with a motion from Dr. Nedum, seconded by Dr. Kadull as follows:

The Fort Detrick Radiation Protection Officer requires from the U.S. Army Medical Unit an appropriate form that specifies the isotope, activity, and quantity of radioactive waste offered him for disposal so that we can conform with Title 10, Code of Federal Regulations, Part 20 and Fort Detrick Isotope License regulations.

e. Floors in Radiological Laboratories

The subject of floor coverings satisfactory for use in radiological-biological applications was discussed. Dr. Nedum recommended that Mr. Meyer discuss the problem with Mr. Humphry Gilbert, Safety Engineer, Safety and Fire Protection Branch, Office of Health and Safety, Atomic Energy Commission, Germantown, Maryland. This action will be taken after listing by Mr. Meyer of the specific problems confronting this installation.

#### f. Transportation of Isotopes

Mr. Meyer brought up the question of off-post transportation of isotopes with reference to the new regulation AR 55-55, 30 June 1964, Transportation of Radioactive and Fissile Materials Other Than Weapons. He will reread such regulations and discuss interpretation with members of Transportation Division. The committee recommended establishing a policy that all off-post transportation of isotopes be made by a professional civilian driver with any exceptions to be approved by the Radiation Protection Officer.

The discussion with Transportation will also include regulations concerning the placarding of vehicles carrying radioisotopes, and passengers riding in the same vehicle with radioisotopes.

#### g. Proposed Co<sup>60</sup> Source for High Dose Irradiation

Mr. Roger Scherff, Tech. Eval. Division, is considering purchase of a large Co<sup>60</sup> source for irradiation, approximately 5,000 curies with a dose rate of approximately 10<sup>6</sup> roentgen/hr. It will not be included in the pending license renewal. The committee looked favorably at the proposal and recommended that the proposal be approached as a Fort Detrick facility. Dr. Kadull recommended that a committee representative of all interested elements of Bio. Labs be formed to consider all aspects of projected use and determine who would purchase the equipment, where it would be stored, and how it would be used. The equipment should be located where it will be available for diverse experiments.

#### h. General Information

(1) An inventory of radioisotopes on hand was requested of all users in January 1965. All users have been notified of the requirement that they will now keep a running inventory of the isotopes on hand. The inventory lists included sealed sources which must be wipe-tested once every 6 months in compliance with our license.

(2) At the suggestion of AMC we now have a 100 mc Co<sup>60</sup> source for calibrating instruments. This is the Army M3A1 source and licensed by the Department of the Army. It is not on our license.

(3) The use of three new forms was initiated during the 1964 calendar year. See attached forms Nos. SNUFD-FL 530, SNUFD Form 531 and SNUFD Form 560. (Incl 1, 2, and 3).

(4) Mr. Shen asked whether it would be desirable to control anti-static devices that are obtainable without a license. Many such devices contain  $\text{Po}^{210}$  (an alpha source with a 238 day half life). It was suggested that a notice be published in the Post Daily Bulletin requesting all personnel to inform Radiation Protection Officer of possession of such devices. Rules for the handling and safe disposal of these devices will be issued.

(5) The Radiation Protection Officer will issue instructions to all laboratory property officers on procedures for ordering radioactive materials and devices in order to avoid the possibility that the Isotope Committee and the AEC license regulations might be advertently or deliberately bypassed by Fort Detrick personnel.

(6) Two new programs that will be submitted to the committee for approval at a later date, were discussed.

4. The meeting was adjourned at 1200 hours.

*George C. Meyer*

GEORGE C. MEYER  
Secretary, Isotope Committee

*Charles A. Glick*

CHARLES A. GLICK  
Asst. Secretary  
Isotope Committee

Appendix A

Programs Approved

1. Programs <del>active</del> 1974	2. Programs closed out
62-1 Leonard - C-14	63-1 Harstad - P-32
62-3 Taverbaum - I-131	63-5 Scherff - P-32
62-4 Kennell - H-125 - sealed sources <i>Active</i>	62-2 Raugh - C-14
63-2 Lepp - K-85	
63-3 Owensy - C-14	
63-4 Gruber - I-131	
64-1 Herdolson - P-32	
64-2 Cavannaugh - C-14	
64-3 Schante - S-35	
64-4 Rossler - C-14, S-35	
64-5 Abalos - C-14	
64-6 Harit - C-14	
64-7 Bates - C-14	
64-8 Brunker - C-14	
64-9 Bellonius - C-14	

Appendix B

Key Passes

Current License

Proposed Change

a. Atomic Nos. 1-85	10 mc each Total 100 mc	25 500
b. Carbon-14	500 mc	no change
c. Sulfur-32	400 mc	300
d. Phosphorus-32	400 mc	500
e. Chromium-51	15 mc	Included in e.
f. Iodine-131	400 mc	200
g. Iodine-125	250 mc	500
h. Tellurium-132 and Iodine-132	300 mc	no change
i. Strontium-90	10 mc (sealed sources)	no change
j. Hydrogen-3 (tritium)	50 mc	200
k. Sealed sources	20 mc	800 mc
l. Cerium-137	10 mc (sealed sources)	Included in e.
m. Cerium-137	100 mc	no change
n. Any product material		no change
o. Any product material		
p. Any product material		
q. Any product material		
r. Any product material		
s. Any product material		
t. Any product material		
u. Any product material		
v. Any product material		
w. Any product material		
x. Any product material		
y. Any product material		
z. Any product material		