MAR 18 1985

FCMLB:FAS
030-03253
(18330)

Veterans Administration Medical Center
ATTN: Mr. Herbert S. Arnett
Director
1030 Jefferson Avenue
Memphis, Tennessee 38104

Gentlemen:

This is in reference to your letter dated December 31, 1984 in response to our request for further information (dated December 6, 1984) regarding your amendment request dated October 1, 1984. Your response did not address the items requested in our letter. In order to continue our review of your amendment request you should submit a description of the safety procedures that you will use at your institution for the use of radioactive iodine as was requested in our December 6, 1984 letter (copy enclosed).

Your December 31, 1984 letter did address item "d" in that it stated that a bioassay program in accordance with Regulatory Guide 8.20, "Applications of Bioassay for I-125 and I-131" (Rev. 1) dated September 1979, need not be performed. A discussion of Regulatory Guide 8.20 may clarify the NRC position.

Routine bioassay is necessary when an individual handles in open form unsealed quantities of radioactive iodine that exceed those shown in Table 1 of the guide. Table 1 states that, with a fume hood of adequate design, face velocity and performance reliability, volatile iodine up to 10 mCi and non-volatile iodine up to 100 mCi may be handled without requiring bioassays. However, in C.1.a., "...quantities shown in Table 1 apply to both the quantity handled at any one time or integrated as the total amount of activity introduced into a process by an employee over any 3-month period." This means that, with a fume hood, any one employee may handle up to 10 mCi of volatile iodine in a three month period without a bioassay. From Table 1, an employee not using a fume hood would be able to use 1 mCi of volatile iodine in a three month period without a bioassay.

OFFICE ▶							
SURNAME ▶							
DATE ▶							

No bioassay program is required for individuals using less than 10% of the Table 1 values in a three month period. However, in C.1.b., when quantities handled are greater than 10% of the Table 1 values, routine bioassay may still be necessary. A written justification for not performing such measurements should be prepared and recorded for subsequent review during NRC inspections. This means that for an employee to use, within a proper fume hood, more than 10 mCi of volatile iodine in a three month period a justification would have to be written for not performing a bioassay.

With your request to increase your possession limits of iodine (I-131 from 50 to 100 mCi and I-125 from 100 to 800 mCi) please respond to the items in our December 6, 1984 letter. We will continue our review of your application upon receipt of this information. Please reply in duplicate and refer to Control No. 18330.

Sincerely,

Francis A. St. Mary
Material Licensing Branch
Division of Fuel Cycle and
Material Safety

Enclosure: Ltr dtd 12/6/84

OFFICE	FCML						
SURNAME	FAStMary						
DATE	03/18/85						

. St. Mary
ensing Branch
Fuel Cycle and
Safety
Regulatory Commission
ton, D.C. 20555

Dr. St. Mary:

is is in reference to your letter dated December 6, 1984, concerning
our letter dated October 1, 1984 to amend By-Product Material License
No. 41-00119-08 (Reference Control No. 18330).

According to NRC Regulatory Guide 8.20 (Revision 1, September 1979,
copy enclosed), the procedures you described in your letter are required
when quantities of Iodine-125 or Iodine-131 handled in unsealed form
are greater than 10% of the values mentioned in Table 1 of the above
mentioned Guide.

According to Table 1, processes with possible escape of iodine carried
out within a fume hood of adequate design, face velocity, and performance
reliability for bound to non-volatile agent are allowable up to 100 mCi.

All our Research groups and Nuclear Medicine Service are using activities
of 10 mCi which is far below the values of Table 1.

We will be looking forward to your response to the Amendment proposed in
our letter dated October 1, 1984. Please do not hesitate to contact me
at any time whould you desire any additional information.

Sincerely,

HASSAN M. OMAR, Ph.D.
Radiation Safety Officer

Enclosures 2

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Medical Center

1030 Jefferson Avenue
Memphis TN 38104

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Veterans Administration

JAN 7 1985

NRC

In Reply Refer To: 614/115

Regional Director (10BA3/115)
Veterans Administration Central Office
810 Vermont Avenue, N.W.
Washington, D.C. 20420

SUBJ: Response to inquiry regarding Amendment of By-Product Material License No. 41-00119-08 (Reference Control No. 18330)

1. Enclosed please find our response to Dr. Francis A. St. Mary's inquiry dated December 6, 1984 concerning our request to amend By-Product Material License No. 41-00119-08 and a copy of NRC Regulatory Guide 8.20, Revision 1, September 1979.

2. Please forward this information to Dr. Francis A. St. Mary, Material Licensing Branch, Division of Fuel Cycle and Material Safety, Washington, D.C. 20555.

HERBERT S. ARNETT
Director

Enclosures 2

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JAN 17 1985

[illegible], M. D. (115)
[illegible] Nuclear Medicine Service
VA Central Office
Washington, D.C. 20420

RECEIVED

JAN 11 1985

SOUTHEASTERN REGION
(10BA3)