



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

IN REPLY REFER TO:  
DML:IB:NB (70971)

SEP 29 1965

Commanding Officer  
U. S. Army Electronics Research  
and Development Laboratory  
Fort Monmouth, New Jersey

Dear Sir:

This refers to your application dated July 16, 1965, for renewal of License No. 29-1022-6.

We have reviewed the application and have the following comments:

1. Enclosure 7 specifies that for personnel working with tritium, an assay of 15 millicuries per liter of urine is investigated. The value for tritium in urine which would represent a body burden is 28 microcuries per liter.
2. Enclosure 9 which deals with leak testing does not indicate that all measurements will be quantitative. Please note that Condition 14.D. in the current license specifies that records of leak test results should be kept in units of microcuries. All leak tests measurements must be quantitative.
3. Section 1.A. of Memorandum No. 385-5 specifies the use of Form AEC-313 for use by the Committee in review of requests for procurement of radioisotopes. Form AEC-313 is an Atomic Energy Commission form and should not be used for internal purposes. We have no objection to your using a form similar to Form AEC-313. The form desired should not be the mechanism for use of personnel desiring to use a radioisotope.
4. Section 2.c.(1) in the document entitled, "Procurement, Shipments, Transfer, Storage and Disposal" states "No radioactive materials will be hand carried in or out of the Laboratories greater than trace amounts as defined in Code of Federal Regulations, Title 10, Part 20." There is no definition of "trace amounts" of radioactive materials in 10 CFR 20. This section should be clarified.

*See 1*

*00/24*

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5. Section 6 of the document entitled, "Procurement, Shipments, Transfer, Storage and Disposal" states that records of receipt, location and use of all radioactive materials must be maintained by the Radiological Protection Officer as long as they remain in USAELRDL and for four (4) years after their disposal. There is no time limit on the maintenance of records. Records must be maintained on a permanent basis.

Upon receipt of the revised procedures and instructions with respect to the matters noted above, we shall continue review of the application.

Sincerely yours,

*Cecil R. Buchanan*  
*for* Nathan Bassin  
Isotopes Branch  
Division of Materials  
Licensing

cc: PEMA

Answer to Comment 1:

The "15 mc" in Inclosure 7, para. 5, of our renewal application is an error in transcription and should have been "15 microcuries".

In the near future, we plan to substitute the above assaying procedure by the services of

Tracerlab, Div of L.F.E.  
1601 Trapelo Road  
Waltham, Mass

who will conduct our urine analysis. They will inform us immediately by telephone and telegram any assay greater than 15 microcuries per liter. The results of other analysis will be sent by mail.

Answer to Comment 2:

The "accurate measurement" referred to in Inclosure 9, para. 3, sentence 2 of "Wipe Test Procedure" of our renewal application is in fact a quantitative determination of the activity on a 1 square inch swipe which is recorded in microcuries in our Wipe Test and Assay Log Book and kept as a permanent record.

Paragraph 1, sentence 1, of "Wipe Test Procedure" (Inclosure 9) will be corrected to read:

"Sealed radioactive sources are monitored for external contamination and/or leakage at intervals not exceeding 6 months, except alpha sources which are tested at intervals not exceeding 3 months."

Answer to Comment 3:

A memorandum correction stating that the parenthetical expression in 1.a. of Procurement, Shipments, Transfer, Storage and Disposal of Memo No. 385-5 "(Application Forms AEC-313 for licensed radio isotopes may be obtained from the Supervisor of Radiation Facilities)" is to be deleted and that Form AEC-313 will be used only by these Laboratories thru the Isotopes Committee to apply for licenses, amendments, or renewals and will not be used for internal purposes, will be distributed to all Laboratories personnel.

Answer to Comment 4:

A memorandum correcting Section 2.c.(1) of "Procurement, Shipments, Transfer, Storage and Disposal" of Memo 385-5 to read, "No radioactive materials will be hand carried in or out of the Laboratories greater than trace amounts. Trace amounts are defined as amounts of by-product material whose concentration is not in excess of those listed in CFR Title 10, part 30, section 30.70 or amounts listed in CFR Title 10, part 31, section 31.100", will be distributed to all Laboratories personnel.

July 4

Answer to Comment 5:

A memorandum correcting Section 6 of "Procurement, Shipments, Transfer, Storage and Disposal" adding the following statement to Section 6, "Hereafter, the records will be transferred to Records Holding Area for an additional 2 years and then sent to U. S. Army Records Center, St. Louis, Missouri."

Records management procedure is being altered to see that Radiation Materials Accounting File is kept permanently.