



Ralston Purina
Company

July 30, 1987

Cassandra F. Frazier
Materials Licensing Section
U.S. Nuclear Regulatory Commission Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Ms. Frazier:

In reference to the letter dated July 23, 1987, Control Number 83715, I have made the following changes and/or additions to our amendment request.

Item 1 in your letter has questions regarding Judy O'Brien's experience in handling radioisotopes. The summary sent included all of Judy's experience. In lieu of this, we request that Item 11 be amended to read "Licensed Material in Item 6 above is authorized for use by, or under the supervision of, the following individual(s) for materials and uses as indicated:

John L. MacDonald Subitem 6.A. through 6.D.
Kathryn S. Phillips Subitem 6.E.

A summary of experience and training for myself is found in the letter dated July 10, 1984. This was sent in request for Amendment No. 20.

In response to Item 2 of your letter, please see Attachment I. This will replace p. 4 of the laboratory rules.

Attachment II is the modified receiving procedure. All orders are approved by the Radiation Safety Officer prior to placement to ensure that we do not exceed possession limit.

Training of radiation workers will be performed initially and a "refresher" program will be given on an annual basis.

Item 5 in your letter addressed the calibration of the beta-detector. In discussion with the distributor, Integrated Genetics/Gene-Trak Systems, I found that they do the calibration, not the manufacturer. The NRC license number for Integrated Genetics/Gene-Trak Systems is 20-19858-01, expiration date Feb. 19, 1992. Their procedures are filed in Region I. I have enclosed Attachment VI-Equipment and Calibrations to replace the one originally sent.

Sincerely,

8801220405 870807
REG3 LIC30
24-08334-02 PDR

Kathryn S. Phillips
Radiation Safety Officer

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REGION III

SS
1572A

Enc. Checkerboard Square
St. Louis, Missouri 63164

AUG 3 1987

ATTACHMENT I

12. Anyone using radioisotopes should have knowledge of the location and proper use of survey instruments.
13. In the case a spill occurs, decontaminate it immediately. Radiation spill team should be notified.
14. a. A routine precautionary survey should be made at frequent intervals during projects. A thorough survey must be done at the end of a project. The routine surveys shall be done in the following manner:
 1. At the end of each working day, the area shall be checked with the survey meter. If there are any readings above twice background, the area where the reading was taken shall be wipe-tested. If any of the wipe-test results is greater than 200 dpm/cm², the worker shall implement decontamination procedures such that this level is reached.
 2. Once a week, the area will be wipe-tested for contamination. The wipe tests will encompass the entire working area. If any test results are greater than 200 dpm/cm², the worker shall implement decontamination procedures such that this level is reached.
 3. At the end of a project, the entire area will be wipe-tested thoroughly. If any test results are greater than or 200 dpm/cm², the worker shall implement decontamination procedures such that this level is reached.
- b. All survey results should be logged and a report should be submitted to the Radiation Safety Officer within 2 working days.
15. Lab personnel should be familiar with all emergency procedures.

ATTACHMENT II

RADIOISOTOPE RECEIVING PROCEDURE

1. When radioactive material is received at the receiving desk, receiving should immediately call the individual who ordered it. If that individual is not available, one of the following people should be called in the the order listed.

| | <u>Work</u> | <u>Home</u> |
|------------------|-------------|---------------|
| Kathryn Phillips | 2806 | (314)846-8531 |
| Shurla Dickinson | 5913 | (314)423-7335 |
| Mark Feldworth | 2100 | (618)876-5513 |
| Les Smoot | 1680 | (314)846-6667 |

2. The individual contacted shall immediately pick up the package and take it to the isotope lab.
3. The package will be inspected immediately upon receiving for possible damage or leakage. If the package is damaged, call the Radiation Safety Officer or aforementioned personnel immediately.
4. The radiation should be measured directly on the surface and 3 feet from the container using the survey meter. If radiation levels are greater than 200 millirem/hour at the surface or 10 millirem/hour at a distance of three feet, contact the Radiation Safety Officer immediately and do not proceed further.
5. The outside surfaces of the container shall be wipe-tested and the results recorded. If the results show activity greater than 22,000 dpm/cm², immediately notify the Radiation Safety Officer.
6. Vessel containing radioactive material should be removed properly from the package and a wipe test of the outside container should be performed for possible leakage. Contents of vessel shall be verified against packing slip. If it is not contaminated, store it in the double container with proper shielding and label. If it is contaminated, decontamination procedures should be followed immediately. All survey and wipe test results are to be recorded on the isotope receipt form.
7. The packaged material should be checked for possible radiation before disposal.
8. Isotope receipt form should be completed and sent to Kathryn Phillips, 4RS.
9. If the radiation levels defined in items 4 and 5 are exceeded the Radiation Safety Officer shall:
 - a. Survey the receiving area for possible contamination. Implement decontamination procedures if necessary.
 - b. Notify the Nuclear Regulatory Commission, Region III, 799 Roosevelt Road, Glen Ellyn, IL, 60137, (312)790-5500.
 - c. Notify the final delivering carrier.
10. After hours delivery - All packages shall be delivered to the guard station. Security shall immediately call the persons listed in Step 1. That person will pick up the package as soon as possible and take it to the isotope lab. The outside surface of the package will be surveyed, according to steps 3, 4, and 5. The remaining steps of the procedure will be performed during normal working hours.

ATTACHMENT VI

EQUIPMENT AND CALIBRATION

1. Gene-Trak Beta Detector (contains 2 Geiger-Muller tubes)
Manufacturer - Radiation Monitoring Services, Inc.
44 Hunt Street
Watertown, MA 02172
Distributor: Integrated Genetics, Inc.
31 New York Avenue
Farmingham, MA 01701
Calibration: By distributor
Schedule: Yearly
2. Geiger Counter - Eberline Model E530
with HP 210 probe and speaker
- Window thickness 1.4-2.0 mg/cm²
Window area - 15 cm² (1.75" diam.)
sensitivity (Co60) - 5000 cpm/mR/hr
efficiency (C-14) - 10%
Calibration: R. M. Wester and Assoc., Inc.
St. Charles, MO
Schedule: Every 6 months.