



DEPARTMENT FOR HEALTH SERVICES

CABINET FOR HUMAN RESOURCES
COMMONWEALTH OF KENTUCKY
FRANKFORT 40621

SP01

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December 21, 1983

James P. O'Reilly
Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N.W.
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

I have been asked by Dr. Allen to repond to the technical comments made in your December 5, 1983, letter concerning the recent review of Kentucky's Radiation Control Program. The responses to the technical comments are attached.

It is my understanding Dr. Allen will not be Commissioner, Department for Health Services, effective January 1, 1984. A response from the new Commissioner should be received within a reasonable period of time.

I wish to commend the thoroughness of Mr. Woodruff's review of the program and to express my appreciation for the recommendations and assistance given which included his participation in the training of staff to conduct inspections.

I hope the attached responses adequately address your comments and recommendations regarding our program.

Sincerely,

Donald R. Hughes, Supervisor
Radiation Control Section
Radiation and Product Safety Branch

DRH:CC:nsd

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RESPONSE TO COMMENTS AND RECOMMENDATIONS ON
ASPECTS OF THE KENTUCKY RADIATION CONTROL PROGRAM:
NRC PROGRAM REVIEW OF OCTOBER, 1983

Category I Indicator: Inspection Priority System and Overdue Inspections

Attached for your review and comments is a revision to the Kentucky radioactive material inspection priority system.

To eliminate the inspection backlog, staff time shall be allotted to the inspection program to accomplish a minimum of 100 inspections during calendar year 1984. These inspections shall be scheduled to give emphasis by priority and by chronology within priority, with constraints imposed by geography and training of junior staff.

It is also noted that a greater number of inspections shall be possible as staff time becomes available upon completion of the administrative documentation recommended during the review. Other factors influencing number of inspections would be regulation updating and staff training. We anticipate being able to comply with our revised inspection priorities, provided approximately 100 inspections are conducted per year.

We plan to eliminate inspection backlogs in priorities 1, 2, 4, 5, and 6 by September 30, 1984; and inspection backlogs in priorities 3 & 7 by December 31, 1985. Emphasis will be placed on priority 3 licenses.

Category II Indicator: Legislation and Regulations

Drafts of regulation updates shall be provided to the Region II office at least 30 days prior to adoption for NRC review and comment. Completion of selected regulation revision is scheduled for completion by June 30, 1984.

Category II Indicator: Management and Administration

Written internal procedures for application processing, inspection policy and procedures, escalated enforcement, and decommissioning or termination of licenses shall be completed by April 30, 1984.

Category II Indicator: Compliance

Inspection forms shall be finalized and adopted for use, including coding to reflect current regulation revisions, by March 31, 1984.

KENTUCKY RADIOACTIVE MATERIALS INSPECTION PRIORITIES
JANUARY 1, 1984

Prelicensing Inspections

Prelicensing inspections are to be conducted for applications which will require comprehensive management or special radiation safety controls. These shall include licenses which would be an inspection priority 1; Type A broad licenses; large, walk-in type irradiator facilities; and waste disposal sites.

Initial Inspections

Initial inspections shall be conducted of licenses in inspection priorities 1 through 5 within six months after material is received and operations under the license have begun. Initial inspections of licenses in priorities 6 & 7 shall be conducted within one year.

Routine Inspections

Routine inspections of licenses in priorities 1 through 5 shall be conducted at intervals corresponding to their inspection priority. Licenses in priorities 6 & 7 are inspected initially and thereafter for resolution of complaints, allegations, or incidents.

Expired and Terminated Licenses

Action shall be taken upon notification that a license has expired or is being processed for termination to ensure licensed material has been properly disposed of and areas wherein material was used can be safely released for unrestricted use. Inspection and confirmatory surveys shall be conducted no later than six months after receipt of the notification.

General Licenses

With the exception of general licenses based upon reciprocal recognition, routine inspections of general licenses are not required except to resolve complaints, etc.

Reasonable efforts to inspect licenses equivalent to a priority 1 license shall be made. Such inspections shall be at an annual frequency, if practical. Lower priorities shall be inspected at job sites as deemed necessary.

TABLE OF INSPECTION PRIORITIES
(Revised January 1, 1984)

Priority 1

- A. MANUFACTURING AND DISTRIBUTION. The application, use, or possession of by-product, source, or SNM involving curie quantities in unsealed form; large-scale operations involving the fabrication, manufacture and distribution of sources; the manufacture of compounds for distribution to other specific or general licensees. The operation in this category-priority generally require special remote handling equipment, air handling systems, liquid waste treatment or retention systems, or environmental monitoring programs.
- B. INDUSTRIAL RADIOGRAPHY. Non-destructive testing both in-house and field.
- C. WASTE DISPOSAL SITES. Disposal by incineration; burial in the ground; operations involving processing and/or repackaging of waste.
- D. IRRADIATORS. Large walk-in irradiators used for batch or assembly line irradiation of products.

Priority 2

- A. BROAD LICENSES.
- B. NUCLEAR PHARMACIES.
- C. WASTE DISPOSAL BROKER. Operations involving the gathering, storing, and transfer to others of prepackaged waste only.
- D. SPECIAL NUCLEAR MATERIAL. The application, use, processing, or possession of SNM in unsealed form and quantities less than a critical mass.
- E. ENVIRONMENTAL. Applications of material to soil, water, air, plants or insect, animal and fish life, where there is an actual or potential release of the material to unrestricted areas; tracers in field-flooding studies.

Priority 3

- A. INDUSTRIAL. Research and development; testing and laboratory experiments; well logging using sealed sources or tracers; manufacturing, processing, or assembling of products, including the distribution of products resulting from such activities; portable nuclear gauging devices, such as soil density gauges; self-contained irradiators or pool type irradiators where sources remain shielded or under water; the operation of nuclear laundries.
- B. MEDICAL. Mobile nuclear medicine, teletherapy, and other human use licenses excluding broad medical.
- C. SOURCE MATERIAL OPERATIONS. Processing of raw ores or sands containing source material, and the processing or conversion of the concentrates containing source material to salts, liquids, gases, or metals.

Priority 4

Reserved.

Priority 5

Reserved.

Priority 6

- A. INDUSTRIAL. Licenses which would otherwise be in Priority 3 but the results of an inspection and evaluation of quantities and forms of material and particular uses give reasonable assurance that:
1. Individuals are not likely to receive radiation doses in excess of 50 percent of limits in 902 KAR 100:020, and
 2. A bioassay program is not required, and
 3. Concentrations of airborne radioactive material in restricted areas or concentrations of radioactive material in liquid or gaseous effluents are not likely to exceed the values of 902 KAR 100:025, and
 4. Contamination surveys, other than leak tests, are not necessary under normal conditions.
- B. SPECIAL NUCLEAR MATERIAL. Subcritical assemblies; sealed or encapsulated sources and foils; self-contained irradiators.

Priority 7

- A. ALL OTHER SPECIFIC LICENSES. All other specific licenses (not covered by other categories) which authorizes possession and use of byproduct or source material or SNM such as: SNM contained in fission chambers; resale of materials or storage only; gauge repair; leak test or instrument calibration services; medical pacemakers; metals containing less than 5 percent by weight of source material; civil defense sources; fixed gauging devices such as flow gauges on pipes and level gauges.