



DEPARTMENT FOR HUMAN RESOURCES
COMMONWEALTH OF KENTUCKY
FRANKFORT 40601

BUREAU FOR HEALTH SERVICES

July 9, 1979

U. S. Nuclear Regulatory Commission
Office of State Programs
Washington, D.C. 20555

ATTENTION: Marie Janinek

This is the third quarter progress report for contract number NRC-06-78-359, State Transportation Surveillance Program, for the period March 29, 1979 to June 28, 1979, in the Commonwealth of Kentucky. Activities during the third quarter were concerned with visiting the facilities throughout Kentucky that have been selected for participation in the study to conduct vehicle and package surveys. Additionally, observation of handling techniques was two quarters of the contract period.

Douglas B. Beasey, who coordinated and performed all the administrative and technical functions, and field travel necessary for the performance of this contract, left state service effective April 2, 1979. Much time was thus spent training two of our field inspectors to perform this work and also our central office staff person was given the additional duties required in the administration of this contract.

Two Eberline RO-3 ionization type instruments were received this quarter and given to two field inspectors for transportation inspection. Whole body and environmental TLD badges were received this quarter and distributed to the field staff to allow an exposure estimate of selected people and storage areas.

A total of 115 packages of radiopharmaceuticals were surveyed during the last three months with 19 incidents of an insufficient Transport Index on the package label being noted by the inspectors. Shippers involved were Mallinckrodt, Medi-Physics, NEN, Union Carbide and Squibb. The radioisotopes involved included Iron-59, Iodine 123, Iodine 131, Gallium 67 and Molybdenum 99/Technetium 99m generators. Iodine 131 appeared to be the most prevalent under TI isotope this quarter. One Iodine 131 package was under TI'd by 2.5; however, most were less than 2 mrem/hr in error. No incidents of over posting of the Transport Index were noted.

Surveys of transport vehicles totalling 7 were done in conjunction with the package surveys where the situation allowed. Of the 7 surveys accomplished, 1 placarding violation was noted. In this case, the vehicle loaded with Uranium Hexafluoride, was not placarded to the front.

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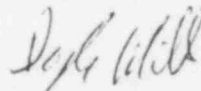
Personnel exposure data was obtained from 2 study locations by observation-estimation. Purolator, Lexington, appears to have a driver who receives, as an average, 12 mR/qtr. Federal Express, Louisville, appears to have drivers who would receive, as an average, 6 mR/qtr. Package handlers who work as plane unloaders receive, as an average, 1 mR/qtr.

The Branch was involved in one transportation incident during the quarter. A Kentucky Highway Enforcement Official pulled a truck placarded 'Radioactive' over due to it leaking liquid onto the highway. Investigation revealed liquid to be water and not associated with the load he was carrying. He was cited by DOT for inadequate placarding, only on three sides, and for driving with an expired permit.

During a routine radioactive material inspection, it was discovered that a nuclear soil density device containing 40 millicuries of Americium 241 was shipped in a package labeled Yellow III as Radium 226 with 0.0045 millicuries and a TI of 1.0.

Plans for the fourth quarter include emphasis on personnel exposure, both for drivers and warehousemen, and environmental monitoring of radioactive storage areas.

Sincerely,



Doyle Mills
Section Supervisor III
Radiation Control Branch

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