DEPARTMENT FOR HUMAN RESOURCES COMMONWEALTH OF KENTUCKY FRANKFORT 40601



BUREAU FOR HEALTH SERVICES

October 16, 1979

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

ATTENTION: Marie Janinek

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

Surveys of transport vehicles totaling 6 were done in conjunction with the package surveys where the situation allowed. Of the 6 surveys accomplished, no violations were noted. Eight (8) shipments of spent fuel came through the Commonwealth during this quarter. One (1) shipment of unirradiated fuel and 60 shipments of LSA thorium oxide also came through the state in this quarter. Two of the inspections were on vehicles with loaded UF-6 shipments and two others were with empty UF-6 shipment containers.

Written contact has been made with 10 other companies, mostly Kentucky licensees, for transport information to see if they may be suitable for inclusion in this type of study. Personal follow-ups to the letters is to be carried out the first month of the fifth quarter of this study. The people we have contacted include an out-of-state nuclear pharmacy, smoke detector and illuminated watch shippers, source material receivers (bulk form) and a re-distributor (small packages), and a mobile nuclear diagnostic services. It is hoped these licensees may give us a better handle on what moves within our borders.

A total of 3 packages of radiopharmaceuticals were surveyed on which we have received data. Not all reports have been submitted to date, due to circumstances beyond our control. No problems were noted with these surveys as far as compliance is concerned. One shipment of Xenon-133 gas was lost in shipment during this quarter and as of this date, no further information on its recovery has been submitted.

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Personnel monitoring data for Davis Transport personnel was obtained for the fourth quarter of 1978 and the first quarter of 1979. The highest exposure for the last quarter of 1978 was 48 mrem and for the first quarter of 1979 was 40 mrem.

Our own TLD personnel monitoring indicated an individual received 23 mrem for approximated 3 month period as the highest exposure for drivers we had monitored. Environmental TLDs indicated levels ranging from essentially background to a high of 327 mrem over this same three month time span. The highest environmental reading was in a local delivery service radioactive material storage area.

The Branch was involved in one major transportation incident during the quarter. A Kentucky Highway Enforcement Official pulled a truck over to the side at a weigh station due to a potential safety violation. The officer then noticed what appeared to be a leak from the vehicle. Vehicle was placarded 'Radioactive'. Investigation revealed fluid to be something picked up on the highway and not associated with the load. Trailer was entered and no spillage from load (powder) was located.

Plans for the fifth quarter include emphasis on personnel exposure, both for drivers and warehousemen, and environmental monitoring of radioactive storage areas. The potential participants will be evaluated for inclusion in the study.

Sincerely

Doyle Mills

Section Supervisor III Radiation Control Branch

DM: gb

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