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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

APR 3 1980

Ms. Linda Spanki Vega 10335 SW 40 St #310 Miami, FL 33165

Dear Ms. Vega:

I am writing in response to your letter regarding radiation contamination. I regret that this answer to your letter has been delayed. The accident and its consequences have created a substantial increase in the agency's workload, which has prevented me from responding to you as promptly as I would have liked to. Let me answer the five questions you asked.

In answer to question 2, radiation contamination can be spread to articles touched, unless the transferable radiation is removed, for example by washing.

In answer to questions 4 and 1, approximately 20 persons were contaminated. No one received skin doses in excess of regulatory limits. Removable contamination was promptly eliminated by washing the skin with soap and water and washing clothing in washing machines. Regulations exist for such precautions in all settings in which radioactive materials are present. Remaining contamination was removed by repeated washing and monitoring over the next several days until contamination was no longer detectable.

In question 3 you asked what is the probability that the persons contaminated will develop cancer. The doses received were low enough as to be not biologically significant; therefore, no discernable health effects are anticipated. There is no significant risk of cancer from doses in the ranges these people received. These persons <u>may</u> be monitored in the future, for example by the Department of Health and Human Services (formerly HEW).

In your last question you asked how to receive literature on radiation contamination. Extensive literature is available on this subject. The following titles may be useful to you; consult a reference librarian at the Florida International University for further background reading.

Title 10. Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions, and Reports to Workers; Inspections."

Title 10, Chapter 1, Code of Federal Regulations, Part 20, "Standards for Protection Against Radiation."

E.J. Hall, "Radiation and Life," New York, Pergamon Press, 1976.

R.E. Lapp, "The Radiation Controversy," Reddy Communications, Inc., Greenwich, Conn., 1979.

C.A. Kelsey, "Comparison of Relative Risk from Radiation Exposure and Other Common Hazards," Health Physics, Vol. 31, August 1978.

R. Muller, "Natural Radiation Background vs. Radiation from Nuclear Power Plants," Journal of Environmental Sciences, August 1972.

H. Inhaber, "Risk of Energy Production," AECB-1119/Rev. 1, Atomic Energy Control Board, May 1978.

"Health Implications of Nuclear Power Production," Report on a Working Group, World Health Organization, December 1975.

R.E. Lapp, "A Workers Guide to Radiation," Atomic Industrial Forum, August 1979.

R.L. Gotchy, "Estimation of Life Shortening Resulting from Radiogenic Cancer per Rem of Absorbed Dose," Health Physics, Vol. 35, October 1978.

"Biologic Effects of Ionizing Radiation," Report of the Science Work Group of the Interagency Task Force on Radiation, U.S. Department of Health, Education and Welfare, Washington, D.C., June 1979.

"The Effects on Populations of Exposure to Low Levels of Ionizing Radiations," Report of the Committee on the Biological Effects of Ionizing Radiation, National Academy of Sciences, Washington, D.C., 1979.

I trust this letter has a swered your concerns.

Sincerely,

Harold R. Denton, Director Office of Nuclear Reactor Regulation