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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
JUL 31 1980

Mr. Barry Sager
2040 Hillsborough
Tallahassee, Florida 32304

Dear Mr. Sager:

I am writing in response to your letters to Commissioner Hendrie and to Mr. Denton concerning radiation from the accident at Three Mile Island. I regret that this answer 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.

The small dose of radiation that people in the area received came from radioactive gases that escaped from the auxiliary building. The average dose of radioactivity the population within 50 miles of Three Mile Island received was approximately 4 millirems. The maximum exposure to any individual was less than 100 millirems, which is less than the yearly dose each person receives as a result of natural background radiation. Doses at these levels result in less than one health effect over the lifetime of all people in this area. Natural background radiation people in the Harrisburg, Pennsylvania, area receive is approximately 125 millirems per year. To put these doses into perspective, note that a traveler flying round trip in a jet between New York City and Los Angeles receives 5 millirems from cosmic rays in the natural background.

More detailed information can be found in the report titled "Population Dose and Health Impact of the Accident at the Three Mile Island Nuclear Station" (NUREG-0558), a summary of which is enclosed.

The Population Dose and Health Impact report estimates the dose to the population within a 50-mile radius of the Three Mile Island site. However, the distance radioactive material travels in the atmosphere from its origin depends on prevailing weather conditions, particularly the wind. Using extremely sensitive monitoring equipment, New York state officials detected minute traces of xenon-133 in Albany, New York, several days after the accident.

I am pleased to provide you with this information.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bernard J. Snyder".

Bernard J. Snyder, Program Director
Three Mile Island Program Office
Office of Nuclear Reactor Regulation

Enclosure: Summary of NUREG-0558

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