NRC/POR



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

JAN 8 1980

Mr. Barry Ford 156 Drakes Lane Summertown, TN 38483

Dear Barry:

I am writing in response to your letter to President Carter regarding the accident at Three Mile Island. 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.

The radioactive materials that were released were primarily radioactive gases. The radioactivity was almost entirely from xenon, which is a chemically inactive gas. As the gases leaked out, the winds diluted them. To determine if food grown in the area was contaminated, the Department of Energy measured the amounts of radioactivity present in the samples of soil, water, air, and vegetation.

Based on these samples and on other information, it was concluded that the principal isotopes in the escaped gases were xenon-133 and xenon-135. Although radioactive iodine was found in samples of some milk, the concentration was less than 1% of the concentration permitted by NRC regulations. Other food samples were tested by the U.S. Food and Drug Administration, and none of the 377 food samples tested contained reactor-produced radioactivity.

The very small dose of radiation that was received by people in the area came from radioactive gases that escaped from the auxiliary building. The average dose of radioactivity received by the population within 50 miles of Three Mile Island 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 received by people in the Harrisburg, Pennsylvania, area is approximately 125 millirems per year. To put these doses into perspective, it should be noted 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.

I appreciate your concerns and assure you that every effort is being made to ensure the continued protection of the health and safety of the public, not only at the Three Mile Island Station, but also at all nuclear power plants.

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Mr. Barry Ford

I am enclosing a summary of a report on the health effects of the TMI accident, NUREG-0558, that may be of interest to you.

Sincerely,

Harold R. Denton, Director Office of Nuclear Reactor Regulation

Enclosure: Summary of NUREG-0558

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Barry Ford 156 Drakges Lane Summertown, Tennessee 38483

The President of the United States c/oThe White House Washington, D.C.

DEAR SIR,

My name is Barry, and IS'm a student in The Farm School. I am writing to a skill ask you what you plan to about the radioactive elements being released XXMMX into the atmosphere and soil by nuclear facilities across the nation.

Are you going to publish an article telling the nation what <u>really</u> hppened at the Three Mile Island nuclear fcility in Pennsylvania? I think you owe it to your country.

I am only 13 yrs. old, but I probably know more about the nuclear fuel cycle KManX and it's lethal side effects than most children my age, and frankly.I'm <u>SCARED</u>!

Please try to answer this letter personally. A ENConcerned Citizen, Barry Ford