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

Ms. Debbie Stein  
159 W. 73 St.  
Apt. 3R  
New York, NY 10023

Dear Ms. Stein:

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

The preliminary findings on the health effects of the radioactive materials released are contained in the interagency task force report, "Population Dose and Health Impact of the Accident at the Three Mile Island Nuclear Station" (NUREG-0558). 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 will be 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 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

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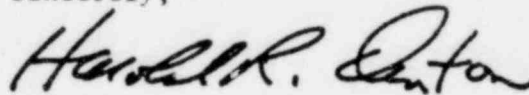
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377 food samples tested contained reactor-produced radioactivity. Thus, the offsite collective dose associated with radioactive material released from March 28, 1979 to April 7, 1979 represents minimal risks (that is, a very small number of additional health effects to the offsite population). Enclosed for your information is the summary of a report on the population effects (NUREG-0558).

The small amount of radioactive iodine that was released from the plant was primarily iodine-131 (I-131). This isotope decays to nonradioactive elements by giving off beta radiation. The time it takes for one-half of the radioactive atoms to decay away is called a half-life. The half-life for I-131 is eight days. By this time, the small amount of I-131 released has largely decayed, and therefore no longer exists as radioactivity in the environment.

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.

Sincerely,



Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Encl: Summary of NUREG-0558

POOR ORIGINAL

51  
NFC —  
President Jimmy Carter  
The White House  
Washington, D.C. 20500

159 W. 73 St. Apt.  
3R  
Manhattan, NY  
10023  
April 10, 1979

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Dear President Carter -

As a very concerned citizen I am anxious to know what actions will be taken to protect the people of this country, particularly those in a relatively close vicinity to Three Mile Island from further contamination due to the radioactive leakage.

I am particularly concerned with the possibility of contaminated dairy products - such as milk bottled near the nuclear plant - being shipped to other parts of the country. Reports in the New York City area have found iodine 131 in milk already.

Personally, I am being to panic, and feel very unsafe I have vowed not to buy or drink dairy products. Pretty soon it will be unsafe to eat anything!

Some action must be taken to prevent exposure of radioactivity to any further degree. It is imperative to protect the population from further exposure - in any form. Please advise me as to what action will be taken with regard to the dairy industry in the vicinity of Three Mile Island. Something drastic must be done!

I would appreciate an answer to my inquiries - and hopefully some reassurance

as to the remedy of this situation - before <sup>(32)</sup>  
it spreads even further -  
Thank-you for your time -  
Sincerely -  
Debbie Stein

POOR ORIGINAL

President Jimmy Carter

**THE WHITE HOUSE**

Washington, D.C. 20500

Dear President Carter:

I'm a concerned citizen and I want to know why your administration has ignored the warnings of the Union of Concerned Scientists. I want to know why Energy Secretary Schlesinger is making the recommendation to speed up nuclear plant construction in the face of glaring evidence of critical safety problems. Please let me hear from you promptly.

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