

REGULATORY DOCKET FILE COPY

Docket No. 50-320

AUG 28 1980

The Honorable Robert S. Walker
United States House of
Representatives
Washington, D. C. 20515

Dear Congressman Walker:

I am writing in response to your note of July 9, 1980, to Mr. Carlton Kammerer regarding the telephone call of July 2, 1980, from your constituent, Mr. Nelson Ginder.

Mr. Ginder's call was in reference to the purging of Kr-85 from the Unit 2 containment building at Three Mile Island. Mr. Ginder referenced station WDAC as the source of a report of krypton being found in the soil around the area, and that krypton would subsequently be found in locally grown foods. It should be noted that the purge was essentially completed on July 11, 1980.

Responding to Mr. Ginder's concerns, we can comment on the reported finding of krypton gas in the soil around the TMI plant vicinity. For the reasons elaborated below, no soil samples were taken during the conduct of the purge. Soil samples were not taken because krypton is a noble gas which is chemically inert and does not concentrate in the soil. As such, there are no significant food pathways for exposure to man from releases of radioactive krypton as a gaseous effluent from commercial nuclear power plants. Thus, there was no valid basis for taking soil samples for analysis of krypton contamination during the conduct of the purge.

During the purge of the TMI-2 reactor building, transient concentrations of Kr-85 above normal background levels were detected, however, all measurements were well below Federal standards for concentrations of Kr-85 in unrestricted areas. When released from the TMI-2 plant stack, the Kr-85 rapidly disperses in the earth's atmosphere and decays in accordance with its half-life (i.e., 10.7 years). Additionally, no radioactive particulates (e.g., Cs-137) were detected in the stack effluent or from environmental atmospheric monitoring during the purge.

For your information, I am enclosing a copy of NUREG-0673, "Answers to Questions About Removing Krypton from the Three Mile Island, Unit 2 Reactor Building," which provides additional information about the properties of krypton.

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The Honorable Robert S. Walker

- 2 -

I trust that this response adequately addresses your constituent's concerns.

Sincerely,

(Signed) T. A. Rehm

for

William J. Dircks, Acting Executive
Director for Operations

Enclosure:
NUREG-0673

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