

Tea

SEP 20 1979

The Honorable Stephen R. Reed
Pennsylvania House of Representatives
Harrisburg, Pennsylvania 17120

Dear Mr. Reed:

I have been asked to respond to your letter of August 8, 1979 to Chairman Hendrie.

In your letter, you stated that you were "entirely baffled by the apparent refusal of the U.S. Nuclear Regulatory Commission to have extensively reviewed the reports by hundreds of Three Mile Island area residents who, during March 28-31, 1979 primarily, and at times subsequent, experienced: (a) metallic taste in their mouth; (b) metallic or iodine-like odor in the air; (c) irritated and watery eyes; (d) moderate or severe respiratory inflammation; (e) gastro-intestinal dysfunction and diarrhea; (f) disruption of the menstrual cycle in females; (g) skin rashes (some appearing as radiation burns); (h) sharp, abnormal pains in joints". We are not aware of large numbers of people reporting formally or informally physiological reactions to the accident. The only knowledge that we have of large numbers of people experiencing physiological reactions to the accident comes through Mr. Arnold of ParaScience International (Enclosure 1). In his letter, Mr. Arnold claims that "hundreds of persons experienced physiological discomfort or ill-health as the result of radionuclides released from TMI-2 on and after March 28, 1979." Mr. Arnold made similar claims before the President's Commission on the Accident at Three Mile Island (May 18, 1979). In response to Mr. Arnold's allegations, the NRC's Three Mile Island Special Inquiry Group has offered to meet with Mr. Arnold to discuss his claim.*

Enclosed for your review is a copy of a report entitled, "Population Dose and Health Impact of the Accident at Three Mile Island Nuclear Station" (Enclosure 2). This report assesses the health impact of the radiation released on the approximately 2 million offsite residents within 50 miles

* Note: We have also received a letter from Mrs. Marie J. Holowka of York, PA. Mrs. Holowka has reported instances of livestock mortality and morbidity. Mr. Karl Abraham of the NRC's Region I office, King of Prussia, Pa., has investigated her allegations and responded to her letter.

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of the Three Mile Island Nuclear Power Plant. Technical staff members of the Nuclear Regulatory Commission (NRC), the Department of Health, Education and Welfare (HEW) and the Environmental Protection Agency (EPA), who constituted an Ad Hoc Dose Assessment Group, prepared the report. The report concludes that the offsite doses associated with the accident during the period March 28 to April 7, 1979, represents minimal risks of additional health effects to the offsite population. The projected number of additional fatal cancers due to the accident that could occur over the remaining lifetime of the population within 50 miles is less than one. This report, of course, did not address the immediate physiological reactions addressed in your letter. However, we have consulted with Dr. Marvin Goldman, a medical consultant for NRC and he has stated that at the radiation dose rates involved, as described in the report, none of the effects identified in items (a) thru (h) above can be expected to be caused by radiation.

If we can be of further assistance to you, please do not hesitate to write us.

Sincerely,

Original Signed by
H. R. Denton

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:

1. Letter from Larry E. Arnold of ParaScience, International to Chairman Hendrie dtd August 2, 1979
2. NUREG-0558

Central File <i>Doyle file 50-320</i>	NRR Reading	RAB Reading
Local PDR <i>w/line</i>	NRC PDR <i>w/line</i>	SECY (3) (2339)
H. Denton	R. Ryan	TMI Inquiry Group
V. Stello	D. Thompson	G. Gower
E. Case	H. Berkow	D. Vassallo
F. Schroeder	D. Eisenhut	J. Sniezek
D. Muller	W. Regan	W. Kreger
T. Murphy	F. Congel	E. Branagan
G. Ertter (EDO-7115)	M. Groff	A. Ferguson
C. Paul	E. Conti	J. Stohr, Region I
		Marvin Goldman

** SEE PREVIOUS YELLOW FOR CONCURRENCE

OFFICE	RAB:DSE/14/79	RAB:DSE **	RAB:DSE **	AD:SA:DSE **	DSE	NRR
SURNAME	EFBranagan:me	FJCongel	TDMurphy	WEKreger	DMuller	HRDenton
DATE	9/3/79	9/4/79	9/4/79	9/4/79	9/11/79	9/18/79

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2

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Harold R. Denton, Director
Office of Nuclear Reactor Regulation

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REFERENCES

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- 2. Radiation Biology (1968), Alison P. Casarett, pp. 224-225.
- 3. CRC Handbook of Chemistry and Physics (59th ed.), Robert C. Weast, editor, p. B-30.
- 4. Note: Using a very conservative value for meteorological dispersion, (i.e., a $X/Q=10^{-1}$ sec/m³ for the nearest offsite location) and a release rate of 2×10^{-8} mg/sec, the iodine concentration would be 2×10^{-9} mg/m³.

DISTRIBUTION

Central File *Don't File 50-*
 Local PDR
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 D. Muller
 T. Murphy
 G. Ertter (EDO-7115)
 C. Paul

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OFFICE	RAB:DSE	RAB:DSE	RAB:DSE	AD:SA:DSE	DSE:	NRR
SURNAME	E.Branagan:me	FJ.Congel	TRM.Murphy	WEK.Kreger	DRM.Muller	HRD.Denton
DATE	8/13/79	9/4/79	9/4/79	8/14/79	1/179	1/179

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