



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

May 13, 1983

OFFICE OF THE
COMMISSIONER

MEMORANDUM FOR: Executive Director for Operations
FROM: John Ahearne *John Ahearne*
SUBJECT: MEETING WITH LANCASTER RESIDENTS

At the request of Public Affairs, on Wednesday I met with a group of concerned citizens from Lancaster, Pennsylvania. During the meeting one member provided the attached "Summary of Medical Material." I promised to provide some NRC response. I recognize the attachment is sketchy and refers to issues which we have addressed many times.

Nevertheless, I would appreciate your providing a response which I could use in reply. A proposed draft by the end of May would be appreciated. The reply should be addressed to Ms. Brenda A. Witmer.

Attachment
a/s

cc: Chairman Palladino
OPA

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McCoy, J.
5/13/83

SUMMARY OF MEDICAL MATERIAL

Although there have been accounts, affidavits and stories by area residents about the physical harm that has occurred possibly as a result of the accident at TMI Unit 2 during March of 1979, these allegations have not been taken seriously by the state. Other people have taken them seriously and have done studies to investigate their validity.

One such group is a Japanese husband and wife research team who came to Middletown during the summer of 1982 and spent eight months interviewing over 200 people. A book entitled Killins Our Own, written by Harvey Wasserman and Norman Solomon (Dell, 1982), describes some of the problems that TMI area residents have faced since the 1979 accident. The last three chapters are titled "How Much Radiation?," "Animals Died at Three Mile Island" and "People Died at Three Mile Island." Excerpting from Chapter 13:

First and foremost, the utility, the NPC and the industry strove to minimize the public impression of how much radiation had escaped at Three Mile Island, and how dangerous it might be

From Chapter 12:

On April 12, for example, in the midst of the crisis, an NPC official named Lake Barrett conceded that monitors in the plant stacks "did not provide accurate readings of absolute quantities of radioactivity released during the accident." High radiation levels, said Barrett, had driven monitors "off scale" and rendered them useless."

In June, Albert Gibson, a radiation support section chief who co-authored the NPC's final report on TMI emissions confirmed the problem. Testifying in front of the five NPC commissioners, Gibson said "All the radiation monitors in this vent stack, where as much as 50% of the radiation escaped,

went off scale, the morning of the accident. The stack monitors had been essentially useless during and after the accident."

Included are the three chapters of this book for your perusal.

In Chapter 13, "Animals Died at Three Mile Island," Dr. Robert Weber went before a hearing of the Public Utilities Commission in March of 1980 and gave public testimony on the accident. Also included is an interview with Dr. Weber by the Japanese research team.

In Chapter 14, "People Died at Three Mile Island," there is a discussion about Gordon MacLeod, Secretary of Health during the accident. Dr. MacLeod was fired eight months after the accident. The state media characterized MacLeod's firing "State government's harshest critic of the way the Thornburgh administration responded to the Three Mile Island accident, and that may have been why he was fired." Quoting from the book:

MacLeod's problems with Thornburgh had begun on March 29, the day after news of radioactive releases from TMI began to spread. MacLeod had, in his words, "Recommended, and on the next day urged the governor, in the strongest possible terms, to call for departure of pregnant women and young children from an area within five miles of Three Mile Island." MacLeod told us later that if he had a chance to do it over he would have urged the departure of children in puberty, who are also extraordinarily radiation sensitive.

Included are some studies published by Dr. MacLeod. One is Some Public Health Lessons from Three Mile Island: A Case Study in Chaos (Ambio, Royal Swedish Academy of Sciences.) Quoting from the summary of the study:

The inadequacy of reactor design, safety controls, and manpower training were not the only problems to surface in the wake of Three Mile Island. Dr. MacLeod argues that Pennsylvania's public health sector was, and still is, woefully unprepared for a nuclear accident. Furthermore, throughout the crisis decisions affecting public health were made by engineers and physicists instead of physicians. The author points out the changing patterns of hyperthyroidism before and after the accident, with a tenfold increase immediately downwind of the reactor sites in Pennsylvania's Lancaster County. He calls for physicians specializing in radiation medicine to join together with nuclear physicists and engineers in setting up more stringent public health safeguards

to deal with future reactor accidents.

Other papers by Dr. Macleod include Medical Ethics in the Nuclear Age and A Role For Public Health in the Nuclear Age (American Journal of Public Health, March 1982, Vol. 2 No. 3).

Another controversy that arose concerned the Pennsylvania Department of Health studies lead by Dr. George Tokohata. Again, Chapter 14 deals quite extensively with the discrepancy between Dr. Tokohata's actual findings and what the press releases were reporting.

Dr. Bruce Muhlolt, a biogeneticist with the Environmental Cancer Prevention Center in Philadelphia, now teaching at Haverford University, conducted a study on Biological Effects of the Accident at Three Mile Island. He presented this testimony at the US NRC TMI Restart Hearings in Harrisburg, March 16, 1981. Quoting from his study:

The GPU Emergency Plan thus attempts to lull the public into a false sense of security that they are being protected above and beyond those radiation protection guidelines set by the EPA. In fact, the truth is the opposite. The GPU Emergency Plan misrepresents the sense of EPA GMPHEs and based its "extra measure of public protection" upon this distorted interpretation. Furthermore, in failing to put any potential releases of radionuclides to the public residing near Three Mile Island into the context of the accident at TMI 2, the GPU Emergency Plan overlooks the cumulative nature of radiation-induced carcinogenic and mutagenic damage to the public.

In 1982 the Japanese research team interviewed over 200 people who said they experienced a strange taste in the mouth after the accident, who smelled an odor like burnt metal, who had dryness of the mouth and throat, or sunburn-like sensations on their skin. Some people claimed they had tearing and irritation of the eyes, tightness of breath, or nausea and diarrhea. Quoting from the forthcoming book, Three Mile Island Revisited:

In addition to people's own experience during the days of the accident, there were a number of sudden deaths of adult animals, and a rush of stillbirths and newborn deaths among the

domestic animals in the vicinity of the plant. Then, through the following months, hundreds of cats died from unknown illnesses, and now, three and one half years after running into stillbirths and C- sections, a local veterinarian is witnessing a three-fold increase in cancer cases of pets and livestock.

The Katagiris ask why have these episodes not been taken up by or caught by the interest of the country's medical and health experts? Is this another case of the traditional coverup? or is there a built in insensitivity in today's health sciences, whose highly systemitized methodology is too alien for such bizarre local episodes?

The Katagiris continue:

There is, however, one well ascertained fact: A standard argument pervades and is openly spoken about within the American scientific establishment. The argument goes as follows: The local farmers' and the veterinarians' allegations were scientifically discredited and claims of symptoms by humans should be considered, rather, in the realm of psychology. This is a perversion worthy of extensive socioclinical study, for there is an apparent pathological complexity involved here. Scientists have even failed to consider atmospheric phenomena, which many local people observed, and which would logically have been expected to occur due to the radioactive releases.

Included is one of those interviews from Three Mile Island Revisited. It is about Becky Meese who is a 32 year old nurse who lives in Middletown with her husband and 4 year old daughter, Pam, who has been diagnosed as having cataracts in both eyes.

A summary of the Katagiri research states that:

1. Hundreds of people experienced a strong metallic taste in their mouths. Some people noticed that the air seemed very heavy, and their voices sounded flat.
2. Dryness of the mouth and throat was experienced; often soreness and burning sensation; persistent thirst.
3. Hot sensations of the skin, particularly on the face and arms, often resulting in a "sunburn".
4. Irritation of the eyes, burning and tearing.

5. Tight chest, shortness of breath, burning in lungs.
6. Nausea and sometimes vomiting. Anxious feeling in the stomach.
7. Diarrhea that persisted in some cases for weeks and months.
8. An area nurse who became very ill after the accident has had recurrent splotching of the skin and burning of her cheeks and nostrils. Those ⁴⁵ recurring outbreaks correlate exactly with radiation venting later admitted by GPU.
9. Two dentists practicing in Lewisberry Township, on the west shore of the river across from TMI, noticed a fogging or banding of X-ray films exposed on Wed. March 28, 1979 and Thurs. March 29, 1979. Film from the same batch exposed before the accident was normal. Neither dentist knew of the accident until Thursday night, March 29.
10. One physician in Goldsboro reports a pronounced increase in leukemia and lymphoma starting about one year after the accident.
11. One physician in New Cumberland reports increases in underactive thyroids, rashes and other dermatological problems, and 2 and one half years after the accident observed a doubling of colon cancer.

In a 2 page synopsis of the Katagiri findings, the Three Mile Island Public Research Center concludes with the following quote:

The government refuses to acknowledge the tremendous cost of this accident in human suffering when the truth is that the death toll is mounting and the agony of these diseases have human faces and names. They are our friends and families.

David Burger, attorney with Burger & Montague, Philadelphia, has won a \$25-million class action suit against General Public Utilities. Included in the suit was a \$5-million public health fund, intended to benefit the people within a 25 mile radius of TMI. Mr. Burger has assembled some of the world's most eminent minds on radiation. On March 28-30 1983 he held a public forum on nuclear power in Middletown. Citizens met with this eminent

group of people, chaired by Dr. Karl Z. Morgan, Arthur Upton of NYU, Hiro Kato of Hiroshima, Dr. Dean Abrahamson, Dr. Edward Radford, Ian McHarg, Frank Von Hippel, Jan Beyer, George Woodwell, and others. The forum participants were asked to conduct a longitudinal biomedical health study on the people who were within the 10 mile radius at the time of the accident. They were also asked to conduct a public health study of the workers at TMI since its opening in 1974; to fund the Katagiri project and to devote the health fund's millions only to the study of problems of those in the TMI area.

Area citizens are asking the news media to look into these issues, to call these eminent professors, study the questions, and learn if there really is a big story here....