



City of Lancaster  
Pennsylvania

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Arthur E. Morris  
Mayor

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November 19, 1980

U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555



ATTN: Director, Three Mile Island  
Program Office

RE: Comments on the Draft Programmatic Environmental  
Impact Statement Related to Decontamination and  
Disposal of Radioactive Wastes Resulting from  
March 28, 1979 Accident  
Three Mile Island Nuclear Station, Unit 2  
Docket No. 50-320

Dear Mr. Snyder:

We believe the EIS is deficient in the following four areas:

1. Cumulative radioactive discharges. We believe that the EIS should include a detailed discussion of the cumulative radioactive discharges to be expected in the Susquehanna River in the next decades. Particular attention should be given to the cumulative radioactive discharges to be expected from nuclear power plants operating and soon to be operating. Only against this background can the effect of any future discharge from TMI Unit 2 be evaluated fairly. Our concern involves both the total Curies present in the water, plant life and animal life and the radioactivity levels, past, present and future.
2. Disposal alternatives. In paragraph 5.2.2.2 of the EIS, eight process water disposal alternatives are mentioned, but several of these are discarded summarily. We believe the following alternatives should be elaborated upon:
  - (a) Release to the air via natural evaporation from a pond.

We disagree with the statements concerning the viability of evaporation as a disposal technique. Our own experience with evaporation of water reservoir sludge indicates

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that natural evaporation from a pond would be feasible (evaporation of approximately 1 million gallons per year from a 53,000 SF pond, 265' long by 20' wide by 7' deep). However, even if one accepts the statements and conclusions concerning equivalent evaporation and rainfall accumulation, it must be recognized that they apply to the volume of water rather than the amount of tritium. Depending upon the time of year evaporation begins, weather conditions and similar factors, the tritium levels should be reduced to 35-50% of the original amount in a 12 month period. If radioactive decay is also considered, a storage period of 2-3 years would reduce the tritium level to below 10% of the original amount.

- (b) Solidify with chemical agents and ship to licensed burial ground.

No increased risks are specified for this alternative, and no details are given as to possible methods of handling and transportation. These details should be provided, and subject to comment.

- (c) Solidify with chemical agents and retain on site in solid form as a concrete slab.

Again, no increased risks are specified, and no details are given about handling. Any problems known to the NRC staff should be specified in detail, and subject to comment.

3. Psychological stress. We believe the EIS seriously underestimates the psychological stress which will be experienced by water users downstream of TMI if processed radioactive water is released to the river. We believe that 20% to 40% of the people in Lancaster will experience significant long-term psychological stress if accident-generated water is released to the river. Because of City concern and customer reduction, pumpage from the Susquehanna facilities was reduced from 12 MGD to 8 MGD after the TMI accident. We feel that the release of accident-generated water would result in a long-term decrease in customer use of our water. A recent University of Pittsburgh study indicates that long-term psychological stress has been underestimated by previous studies of the accident and its aftermath. (See the attached article concerning the study). We strongly urge that local release to the river of processed water be rejected as an alternative.

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The psychological stress which would be experienced by a large proportion of local residents would be unacceptable.

4. Costs of alternatives. We assume that at some point the costs of various alternatives will be considered. Estimates of the costs of the alternatives should be specified in detail, and should be subject to public comment.

We support the rejection of the "no action" alternative. The indefinite use of the TMI site as an uncontrolled waste storage or disposal facility is totally unacceptable.

The above matters should be addressed directly, clearly, and in detail and the Commission's draft comments on such matters should be subject to public comment.

Sincerely,

*Arthur E. Morris*

Arthur E. Morris  
Mayor

AEM/dj  
enclosures

# May Affect Seafood Industry

HAVRE DE GRACE, Md. (AP) — Dumping nuclear waste from Three Mile Island into the Susquehanna River would have a disastrous effect on the struggling seafood industry in the upper part of Chesapeake Bay, a federal hearing on the disposal plan has been told.

The warning came from some of the more than 130 residents, fishermen and politicians who jammed a high school auditorium here to criticize the proposal to dump treated water from the crippled Pennsylvania nuclear plant into the river.

"We don't need this contamination," said Howard Sexton, a commercial fisherman. "We already have enough problems. A lot of guys like me around here are striving to make this bay and our community more of a place to come to for seafood."

Area fishing has been lean in recent years. Sexton noted.

Officials from the Nuclear Regulatory Commission and other federal agencies spent four hours Wednesday night discussing the dumping plan.

Dumping water from the nuclear plant — the site of the worst commercial nuclear accident in U.S. history in March 1979 — could be one safe cleanup method, the officials said. They emphasized that

no decision on dumping had been made.

"It's our view that the water could be released into the Susquehanna River," said Bernard Snyder of the NRC. "However, there are competing considerations here ... (and) this is where the blind application of regulations needs to be tempered."

"We're sensitive to the concerns of the people in this area. I'm personally very sensitive to that. I have spent the last 25 years on the Chesapeake Bay ... I love to eat crabs, and I intend to do (so) in the future."

Snyder also noted that several studies have shown the dumping would have no detrimental effect on the bay or river.

The Susquehanna empties into the bay here and residents all along the southern portion of the river have grown concerned over the impact of the nuclear accident further upstream.

Many residents here have stopped drinking the tap water which is drawn from the river.

"We are concerned because it is our drinking water," said Havre de Grace Mayor Charles Montgomery before the hearing. "But it seems to me there shouldn't be this sense of futility, of frustration. After all, the federal government, the state and the utility are continuing to monitor the water."

## Long-term Depression Prevalent In Mothers Living Near TMI Plant

PITTSBURGH (AP) — Many mothers of young children living near the scene of the nuclear accident at Three Mile Island suffered long-term depression, according to a study which contradicts previous findings that mental stress resulting from the accident was short-lived.

The Kemeny Commission, a blue-ribbon panel that investigated the March 1979 power plant accident, said last October "the most severe health effect of the accident was severe mental stress, which was short-lived."

"I think our study shows that they were wrong," Dr. Evelyn Bromet of the University of Pittsburgh said at a press conference Thursday. "There were long-term effects."

There were nearly twice as many cases of anxiety and stress among mothers living within a five-mile radius of the damaged reactor, compared to mothers in a control group living near another nuclear power plant reactor in Pennsylvania, Ms. Bromet said.

She said many of the 624 mothers studied experienced sleeplessness, loss of appetite, indecision and other signs of psychological depression during the year after the accident.

"Twenty-five percent of the mothers at Three Mile Island showed clinical levels of depression or anxiety during the year following the accident," Ms. Bromet said, adding that 12 percent of those with problems sought professional help.

Ms. Bromet said the problems experienced by TMI mothers diminished with time. But compared to two other Middletown-area groups tested, the mothers exhibited significantly higher levels of anxiety and depression.

The other groups were workers at the nuclear power plant, who faced possible radiation exposure and loss of work, and mental health patients, who generally are more susceptible to stress.

Pregnant women and children under five living within five miles of the plant were the only people Gov. Dick Thornburgh urged to evacuate during the accident at the General Public Utilities Corp. re-

erating station.

Research will continue over the next three years to measure the duration of the mental problems. The study was commissioned by the National Institute of Mental Health at a cost of about \$375,000.

Ms. Bromet was principal researcher on the study by the university's Western Psychiatric Institute and Clinic.

Pennsylvania's Welfare Department called the study "the most authoritative and detailed" of any so far completed on the health effects of the nation's worst commercial nuclear power plant accident.

The control group used for comparison was 312 mothers of young children living within five miles of a nuclear power complex at Shippingport, Pa., several hundred miles away from Middletown.

Fourteen percent of them reported clinical levels of depression, while 5 percent of them sought professional help, she said.