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Mrs. Hillary Rodham Clinton
The White House
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Washington, D.C. 20500

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Dear Mrs. Clinton:

Having heard of your deep personal interest in the plight of the children in Russia, Belarus, and Ukraine who are now suffering from thyroid cancer caused by the Chernobyl disaster, I am taking the liberty of writing to you on a related subject: the lack of adequate radiological protection for the thyroids of American children. I am writing in my capacity as a private citizen, not in my professional capacity as Counsel for Special Projects at the U.S. Nuclear Regulatory Commission.

As you know, airborne radioactive iodine from the damaged Chernobyl plant, both inhaled and ingested through milk and food, lodged in the thyroid glands of large numbers of children. Normally an extremely rare disease, childhood thyroid cancer has reached epidemic levels in the affected areas. Over 1000 cases have been reported already, and the numbers are climbing rapidly. The thyroid is known to be highly sensitive to radiation, especially in children, but no one expected to see so many cancers so soon.

A cheap and effective protective drug, potassium iodide (KI), if administered in time, could have saturated the affected children's thyroids with iodine in a harmless form and thereby prevented the radioactive iodine from taking hold. But in the inefficiency, confusion, and misinformation that characterized the Soviets' response to Chernobyl, far too few children and adults were given the drug. In Poland, by contrast, where virtually all the nation's 10 million children received KI in the aftermath of the Chernobyl accident, health authorities credit it with having prevented any increase in the incidence of the disease. A medical journal article co-authored by a Polish medical officer and an NIH doctor reported minimal side effects: out of 18 million persons given the drug, only two required brief hospitalization for allergic reactions.

All over the developed world, public health and emergency planning experts recognize that the most significant health lesson learned from Chernobyl is the need for an effective program to give out potassium iodide in radiological emergencies. "International Basic Safety Standards" to which the U.S. is a signatory call for using KI whenever likely radiation doses to the thyroid exceed specified levels. France stockpiles the drug, as do Germany, Britain, Switzerland, Japan, various Canadian provinces, Poland, Austria, Sweden, Russia, Belarus, Ukraine, the Czech Republic, and Slovakia, among others.

One nation, however, remains backward, adhering to policy adopted just nine months before Chernobyl and never revised since. That is the United States.

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Our national policy describes KI as "not worthwhile."

Why are America's children less well protected than the children of other nations with nuclear power plants? Strangely enough, the answer may lie in the no-holds-barred political combat 15 years ago of two strong-willed regional politicians with rival ambitions for national prominence -- John Sununu, Republican of New Hampshire, and Michael Dukakis, Democrat of Massachusetts. Their battle was over the almost-completed Seabrook nuclear power plant. Located in New Hampshire, Seabrook was close enough to the state line that much of the 10-mile emergency planning zone mandated by NRC regulations was in Massachusetts.

In the fall of 1982, Sununu was running for Governor on a platform that included removing all obstacles to the Seabrook plant in its efforts to obtain an operating license from the Nuclear Regulatory Commission. Dukakis, his eye on the race for the 1984 Democratic nomination, was just as determined to win renown for having prevented Seabrook from operating. Refusing to allow any state cooperation in emergency planning for the plant, he went so far as to order dismantling of the sirens that would have warned local citizens if an accident occurred.

The open question was whether Massachusetts, after refusing to cooperate in emergency planning for Seabrook, could then become a party to the Seabrook operating license proceeding and argue that the deficiencies in emergency planning required the NRC to deny the plant a license. In September 1982, an NRC adjudicatory panel answered that question in the affirmative, declaring that Massachusetts was admitted as a party to the proceeding, and that it could litigate its contention that emergency planning was inadequate.

As it happened, it was just at that time that the Federal Government was poised to implement one of the major recommendations of the Presidential Commission that investigated the 1979 Three Mile Island accident: that potassium iodide be stockpiled for thyroid protection in the event of a nuclear accident. For three years, the relevant Federal agencies had been in agreement that KI stockpiling was a sensible and necessary protective measure. The Federal Emergency Management Agency (FEMA) had budgeted funds sufficient to buy a large supply of the drug, and the NRC staff, in a September 1982 memorandum, asked the five NRC Commissioners to approve a draft interagency policy statement favoring its stockpiling and use.

Suddenly, however, the engine was thrown into reverse. Just 2½ weeks after asking the Commissioners to endorse the pro-KI policy statement, the NRC staff sent a new memorandum withdrawing the earlier paper. The staff now advised that it could produce a new analysis concluding that KI was much less cost-effective than previously thought, and on this basis, would propose a new policy statement that would be negative toward the stockpiling and use of the drug. The staff added a significant new fact: FEMA, an Executive Branch

agency, had just dropped its plan to purchase KI.

Why did FEMA do an about-face? It has never explained. Until it does, one can only wonder whether someone in the Executive Branch, aware of the recent adjudicatory decision at NRC, had visualized a not implausible scenario: the Federal Government declares that KI is an important part of emergency planning; Massachusetts refuses to allow it to be stockpiled in the state; and Governor Dukakis then argues to the NRC that the lack of KI in Massachusetts is one more reason to deny Seabrook a license to operate. I emphasize that this is no more than conjecture on my part. There can be no dispute, however, that the Federal Government's abrupt reversal on the desirability of KI, whatever its cause, could not have come at a more opportune time for Seabrook's backers, including John Sununu, who won his race for Governor.

In due course, the NRC staff prepared a memorandum that purported to show that KI was not cost-effective, even though the pills cost only pennies apiece. In a public briefing for the Commissioners in November 1983, senior NRC staff officials explained that nuclear accidents in which KI would be useful were so rare, and the consequences of a radiation-caused thyroid "nodule" were so slight, that it would be cheaper to treat such disease after it occurred than to spend even a small amount of money on KI for prevention. At no point did the briefers suggest that there might be non-monetary reasons for preserving people's health.

The briefers spoke only of "nodules," not of "cancer." Sometime afterwards, it was revealed that their statistics described not all radiation-caused nodules, but only the benign ones. The malignant nodules, about 40% of the total, involve both greater consequences for the patient -- including a five to ten percent risk of death -- and higher medical costs.

The then NRC Chairman, Nunzio Palladino, was skeptical of the briefers' presentation. He commented that if he survived an accident because of twenty cents' worth of KI, he would think it "small change compared to the risk." One of the staff members quickly corrected him, explaining that "the surviving question is not the question." The issue was, rather, "averting an illness." The illness was described in terms suggesting something quite trivial: "There's a few days' loss from -- it's a relatively simple operation that's involved in removing the thyroid or removing the nodules."

Ask any thyroid cancer patient to comment on this last statement and the reply is likely to be unprintable. In my own case, thyroid cancer, almost certainly caused by x-ray treatments of my tonsils and adenoids in infancy, had significant effects on the quality of life for me and my family. First appearing when I was 26, it recurred 16 years later and took repeated radiation treatments over a four-year period to eradicate. If not for those treatments, which made procreation risky, my wife and I might well have had a third child.

Any patient with cancer or some other serious disease will also tell you that though you may do your best to shelter your children, the whole family nevertheless pays a price. I remember once coming home from the hospital after a radiation treatment with instructions to avoid close contact with my children, because my system was still full of radioactive iodine. It took my six-year-old daughter, who wanted a hug, only moments to figure out that I was backing away from her. She burst into tears and asked, "Daddy, will you still love me when you die?"

Considerations such as these can easily be dismissed, of course, as rank emotionalism. I would counter that in a humane, civilized, and moral society, it is entirely appropriate to consider the real-world effects on real people of Governmental action -- and inaction. To date, however, such considerations are not reflected in the dollars-and-cents cost-benefit analysis on which this country's KI policy is based. Perhaps because we are so distant from Chernobyl, and do not have to confront too closely the reality of childhood thyroid cancer, we continue to ignore what this disease can do to the lives of children and their parents.

I should add that the problem of radiation-caused illness is not limited to cancer. Hypothyroidism, which can cause permanent retardation, is also a major concern.

For some eight years, I have done everything in my power to persuade the responsible agencies of this Government to revise our country's erroneous policy on potassium iodide. So has the American Thyroid Association, which, under the leadership of such experts as Dr. David Becker, of New York Hospital/Cornell Medical Center, and Dr. Jacob Robbins, of the National Institutes of Health (not acting in his official capacity), has been pleading since 1989 for a change in Federal policy on KI. But despite all the new data from Chernobyl on the risk to children's thyroids, the old policy remains in place.

Given that the issue is one of health and safety, the Government has moved remarkably slowly in responding to my own and the American Thyroid Association's concerns. As a longtime employee of the NRC, I filed a "differing professional opinion" in 1989 that led the NRC staff -- after five years of study -- to agree with me that stockpiling of KI was a prudent measure and should be adopted. Unfortunately, as described in the enclosed op-ed piece in the New York Times, the NRC Commissioners in 1994 divided 2-2 on the staff's recommendation, and as a result, the status quo was preserved.

In September 1995, therefore, I filed a petition for rulemaking with the NRC, in my capacity as a private citizen, and at the same time, I asked FEMA to revise the Federal policy statement on KI. Twenty-one months later, neither agency has yet acted. In response to my filing, the Federal Radiological Preparedness Coordinating Committee, which operates under the aegis of FEMA, last November approved in principle a new policy under which the Federal

Government would buy KI for any state wishing to stockpile it. But seven months later, no announcement of this decision has yet appeared in the Federal Register.

For the most part, the states thus remain in the dark victims of years of inadequate and inaccurate information from the Federal Government. (Tennessee and Alabama are exceptions, having long maintained stockpiles of the drug.) Recently, another state gave up on waiting for action from Washington and investigated the matter for itself. This was Maine, which in response to inquiries from a family living near a nuclear plant, referred the issue to its Radiation Advisory Commission. Last December, I had the honor to be invited to address that Commission, which later the same day voted to support stockpiling of KI in the vicinity of the state's nuclear power plant. Maine's new policy has since been put into effect. It is safe to say that if other states were as well informed as Maine, stockpiling of KI would now be the norm.

The Government's failure to protect the thyroids of the American public, and to inform the public of the issue, is now a reproach to three successive Administrations. I entreat you to help ensure that this is the Administration in which the problem is at last resolved, responsibly and honestly, with the health needs of children put ahead of the public relations needs of the nuclear industry and the bureaucrats' fears of embarrassment. The stakes are just too high to let extraneous concerns take precedence over our children's well-being. If ever there is a nuclear accident in which the lack of KI stockpiling causes harm to the thyroids of American children, the public will not forgive those responsible for the Government's inaction, and those responsible may have some difficulty forgiving themselves.

Sincerely,

Peter G. Crane

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Attachment: "The Nuclear Stockpile America Needs," The New York Times, April 5, 1996

cc: Director James Lee Witt, FEMA
 Chairman Shirley A. Jackson, NRC
 Commissioner Kenneth C. Rogers, NRC
 Commissioner Greta J. Dicus, NRC
 Commissioner Edward McGaffigan, Jr., NRC
 Commissioner Nils J. Diaz, NRC
 Dr. David V. Becker, American Thyroid Association
 Dr. Jacob Robbins, American Thyroid Association
 NRC Docket File (PRM-50-63)

The Nuclear Stockpile America Needs

By Peter Crane

A ROCKVILLE, Md. April 26 will mark the 10th anniversary of the explosion at the Chernobyl nuclear plant near Kiev, Ukraine, which sent a radioactive cloud into the atmosphere of Eastern Europe.

Today, an epidemic of childhood thyroid cancer marks the area most affected by the fallout — Ukraine, western Russia and Belarus. In Belarus alone, the rate for this disease climbed from 1 per million in the decade before the Chernobyl accident to 36 cases per million in 1993, according to the World Health Organization.

Poland, which also received a dose of fallout, has been spared an upsurge of thyroid cancer. Unlike their Soviet counterparts, Polish health authorities quickly distributed potassium iodide, a cheap and effective drug that protects the thyroid from exposure to radioactivity.

Today, the stockpiling of potassium iodide is standard practice in the developed world — except in the United States. Our national policy is that it is not worthwhile.

The value of potassium iodide first came to public notice after the Three Mile Island accident in 1979, when the Kemeny Commission, investigating the accident for President Jimmy Carter, strongly recommended the creation of regional stockpiles.

The Federal Emergency Management Agency and the Nuclear Regulatory Commission initially agreed. But in 1982, with the Reagan Administration in the White House, the nuclear power industry announced opposition to the drug's use, saying it protected only the thyroid gland and could give individuals who took it a false sense of security. The two Government agencies soon reversed themselves.

The result is the current policy, announced in the Federal Register in July 1988, just nine months before Chernobyl.

The Government's policy statement was based on a finding that potassium iodide is not "cost-effective," because nuclear accidents are very rare and treating any resulting

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thyroid disease would be relatively easy.

Thyroid cancer is seldom fatal, but treatment means surgery, usually followed by radiation treatments. (I myself have had thyroid cancer, caused by the irradiation of my tonsils when I was a child in the late 1940's.)

The disease is more aggressive in children than it is for adults. And radiation-caused hypothyroidism (underactivity of the gland) can result in mental retardation.

Now, as the medical data on the consequences of Chernobyl have mounted, many in our Government recognize the need for a change in policy. (As a private citizen, I have petitioned the agency for this change.)

In 1994, the N.R.C.'s staff, citing recommendations from the American Thyroid Association and W.H.O.,

Potassium iodide would protect us from fallout.

advised the agency's commissioners that it would be prudent to buy the drug and distribute it to the states. They calculated that a national supply could be bought for "a few hundred thousand dollars," and said that it would be cheaper to buy the drug than go on studying whether to do so.

But representatives of the nuclear power industry contended that any change in policy could affect "public confidence in the technology." The commissioners ultimately divided, 2-2, on the staff's proposal, which meant a rejection.

Potassium iodide is no panacea; it protects only the thyroid gland. Ideally, the population should be evacuated when radiation exposure seems likely. But adverse weather conditions, blocked roads or widely dispersed radioactivity might make evacuation infeasible. In such cases, potassium iodide — safe to stockpile, with a shelf life of at least five years — would give valuable protection.

If the day ever comes that American children suffer because the Kemeny Commission's recommendation was ignored, what will officials say to their parents? □

NEW YORK TIMES, APRIL 5, 1996