

# AN OPEN LETTER TO PRESIDENT BARACK OBAMA: ELIMINATING NUCLEAR “WEAPONS”

C. A. Hilgartner, MD

30 November 2009

Mr. Barack Obama  
President of the United States  
The White House  
1600 Pennsylvania Avenue NW  
Washington DC 20500

Dear Mr. Obama:

I write to you before we humans can quite manage to forget that the Nobel Committee awarded you the Nobel Peace Prize for 2009. As I understand it, that Committee does not offer reasons for making the awards they make. We can speculate that they did it to acknowledge the contributions towards world peace you made by getting elected President and by the ways you conducted your political campaign. Or perhaps they did it to foster and support your sense of responsibility to/for the survival of Planet Earth.

At any rate, by awarding you the Nobel Peace Prize, the Nobel Committee has increased your cachet, your prestige, your power as President and Commander in Chief.

I write to offer you my support in keeping promises you made during your campaign and during your tenure in office, to date. I urge you to follow through, and to eliminate the threats to human and biosphere survival posed by nuclear devices in themselves, and by the present numbers of nuclear devices on Planet Earth.

(I call them “devices”, for the term “weapons” implies that “They will harm Them, but not Us”—and I believe that nuclear “devices” harm every organism on Planet Earth, to at least some degree.)

I intend to make two points in this letter: a) The role in human affairs actually occupied by nuclear devices, and by our "arsenal" of nuclear devices, and b) The power you demonstrably have to affect that role.

A. On or about 2 November 1952—my age 20—I heard about the H-bomb test conducted on Bikini Atoll. While most people on the planet praised—exulted in—the tremendous triumph of science, the great advance in military weaponry, I saw the Bikini test as a **survival-error**. At that time, if anyone had asked me what I meant, I might have had some difficulty coming up with much of an answer. Today, however, I can explain that inference clearly and coherently.

1. In the process of detonating an "atom-bomb"—a device that depends on nuclear fission—the persons who detonate it raise some mass of metal ("Fat Man" (Hiroshima), 10,200 pounds (4,630 kg); "Little Boy" (Nagasaki), 8900 lb (4000 kg)) to temperatures of some

300,000 degrees Kelvin. (The zero of the Kelvin scale equals minus-273.16 degrees Centigrade, or minus-459.69 degrees Fahrenheit.) The temperatures at ground-zero, directly below the fireballs, reached or exceeded an estimated 6000 degrees Kelvin. (In comparison, scientists have measured the surface of the sun at some 5800 degrees Kelvin).

2. To detonate an "H-bomb"—a device that depends on both nuclear fission and nuclear fusion—raises an even larger mass to much higher temperatures—for a fusion reaction even to start and to become self-sustaining requires temperatures of  $3.5 \times 10^7$  (= 35,000,000) degrees Kelvin (or greater).

At such temperatures, Earth-style organisms do badly indeed. We vaporize; and all chemical bonds between the elements in our hot vapors dissipate.

Both A-bombs and H-bombs prove deadly in numerous other ways. To explode either one produces an intense burst of hard radiation, which quickly kills organisms close enough to the epicenter; fatally irradiates organisms somewhat further away; and produces irreversible radiation burns and genetic damage on/in those still further away. Besides the hard radiation, the vast quantities of heat in various forms which the explosion produces harm organisms in various ways. The explosion produces an electromagnetic pulse capable of frying almost all electronic equipment within range (and we depend on electronic equipment). It produces blast-waves capable of flattening cities or forests, and the combustible materials subjected to radiation, heat and blast burn so rapidly that they produce fire-storms. The mushroom cloud spreads out, and eventually distributes un-fissioned plutonium, uranium, or other fissionable isotopes—each one highly poisonous, and highly radioactive—over the entire surface of the Earth. The products of fission include many radioactive isotopes, some of which act also as chemical poisons. These also get distributed, and cause death or damage to organisms. The kinds of hard radiation that come from the fission/fusion and from these heavy metals and lighter by-products of fission get specifically absorbed by the DNA of exposed organisms—and to absorb hard radiation damages or destroys DNA. So—to detonate even one A-bomb damages all living organisms on Earth, to at least some degree.

I don't know how many nuclear "devices" we humans have in our "arsenals" at present, but at the height of the "Cold War", as I have read, we had enough of such devices to target at least one on every human settlement with a population of 5000 or more humans on the entire planet.

Several nation-states, including the United States, have many of these "devices" on hair-trigger alert. I don't know about other countries, but the United States flies airplanes armed with live nuclear "devices" up and down both the Atlantic and Pacific coasts, probably 24 hours a day. Computer malfunctions, human error, intervention by humans with malicious intent, and other exigencies could bring one or more of these "devices" onto target(s) which included humans, and detonate the "device(s)", with deadly effect. And such an "accident" might induce others with nuclear "devices" at their disposal to launch their own in "retaliation", or because they had them to launch, or for no specifiable reason.

Our so-called "clean" nuclear power plants produce the energies, and the temperatures, associated with nuclear fission, but at controlled rates—and use these energies to boil water, to

run steam turbines, to produce electricity. And these “reactors” entail many of the disadvantages of nuclear “explosives”.

These facts make it clear that nuclear devices can do one and only one thing: Render Planet Earth less and less habitable by Earth-type organisms. And that “trend” has a clearly describable end-point: It has reached its “completion” when we have made the entire surface of Planet Earth no more habitable than the surface of the Moon.

I do not consider species-suicide and pan-biocide a valid human aim or purpose.

In other words, nuclear “devices” cannot serve any valid human purpose.

B. As for how political or social power works, I focus on the construct of **cynicism**. In my opinion, someone displays cynicism when s/he uses her/his strengths to assert her/his "weakness".

In my opinion, you displayed cynicism when you spoke recently from the podium of the Presidency of the United States, saying that you couldn't do anything to get rid of the nuclear devices under your command until the whole rest of the human race had become ready to dispose of *their* nuclear devices.

I remind you that you hold the role of Commander in Chief of the U. S. Military. You have the power to order your military forces to de-commission ALL the nuclear "devices" possessed by the United States, to disassemble them and to store their "parts" or "components" so as to prevent theft and/or re-assembly.

As a preliminary to that step, I believe you could take the role of a leader, and persuade a majority of your colleagues in the Administration, in Congress, and among the citizens of the US and probably of the world, that—if we in the United States should find ourselves subjected to attack with one or more nuclear “devices”—for us to launch a retaliatory attack would not repair the damage here at home, but rather, would “merely” mean that *every human*, or at least many other humans, would die because we retaliated for the attack on us.

In 1946, the science-fiction author Theodore Sturgeon published a story entitled “Thunder and Roses”—a direct literary response to the attacks on Hiroshima and Nagasaki. This story makes that point eloquently.

I have read rumors that you fear that if you act in ways that displease the military (especially high-ranking officers)—e.g., by ordering the end of the wars in Afghanistan and/or Iraq—they would rebel, refuse to carry out your orders, and perhaps stage a military *coup d’etat*.

But you have certain advantages on your side. You could address the Congress, and the citizens of the US, the Joint Chiefs, etc., explaining how nuclear “devices” serve no valid human purposes. That might take a carefully-planned educational effort on your part—aided and abetted by those in your administration that you could succeed in persuading to hold that view themselves.

If I can provide support or other services in that direction, you have only to ask me—I'll do what I can.

You can explain your reasons in simple terms: You do these things in order to revoke—un-do—species-suicidal decisions made by some of your predecessors.

To the other holders of nuclear devices, you could say, "In good faith—do as I have done!"

Do you seriously want to remove the possibility that we humans will commit species suicide and pan-biocide by an all-out use of nuclear devices? So far, no nation other than the United States has used nuclear “devices” on human targets—so we might prove the most fearful that others would use such devices on us. After all, we did it first--! We know that “good people” can do things like that!

You have an opportunity to display detectable courage. Eliminate the “devices” within your reach. Then persuade other holders to do likewise.

I believe that a bit of sober reflecting will convince you that you **can** do these things—and that might prove worthwhile: doing these things may induce others to do likewise.

Respectfully yours,

A handwritten signature in black ink that reads "C. A. Hilgartner". The signature is written in a cursive, flowing style.

C. A. Hilgartner, MD