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## Science and Technology

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# Science editor Hecht testifies, 'methyl bromide ban will cost lives'

*As one of his last acts, William Reilly, administrator of the Environmental Protection Agency under George Bush, banned methyl bromide, a widely used pesticide and fumigant, on Jan. 19, 1993. The ostensible reason is that methyl bromide is an "ozone depleter," although the scientific evidence for this is uncertain at best. When asked directly at a press conference Nov. 12, 1992, if the EPA had studied the consequences of such a ban, Reilly admitted that there was no such study. He also said that no effective substitutes were available for this benign agricultural chemical.*

*At the November 1992 meeting in Copenhagen of the signers to the Montreal Protocol banning "ozone-depleting" substances, the United States had proposed adding methyl bromide to the list. The proposed amendment failed, however, after meeting fierce opposition from Israel, France, Italy, Spain, and Greece, and especially from Third World nations, with Kenya leading the battle. For some developing nations, the ban on methyl bromide would mean that they could no longer be self-sufficient in food, nor could they export certain crops that require fumigation.*

*The proposed excise tax on methyl bromide was part of the continuing campaign of the EPA and environmental organizations to ensure that methyl bromide is phased out—no matter what the cost to the economy. During hearings by the Subcommittee on Select Revenue Measures of the House Ways and Means Committee, subcommittee chairman Charles Rangel (D-N.Y.) commented that he was convinced by the agricultural groups that such a tax was "premature" because the science was too "uncertain."*

*We reprint below the testimony of Marjorie Mazel Hecht, the managing editor of 21st Century Science & Technology magazine. Other groups testifying at the Sept. 23 hearings included the California Carrot Board, the Western Growers Association, the California Association of Winegrape Growers, the American Agriculture Movement, and the Crop Protection Coalition.*

I am Marjorie Mazel Hecht, representing 21st Century Science Associates, publishers of the magazine *21st Century Science & Technology* and the book *The Holes in the Ozone Scare: The Scientific Evidence That the Sky Isn't Falling*.

We strongly oppose the proposal to add methyl bromide,

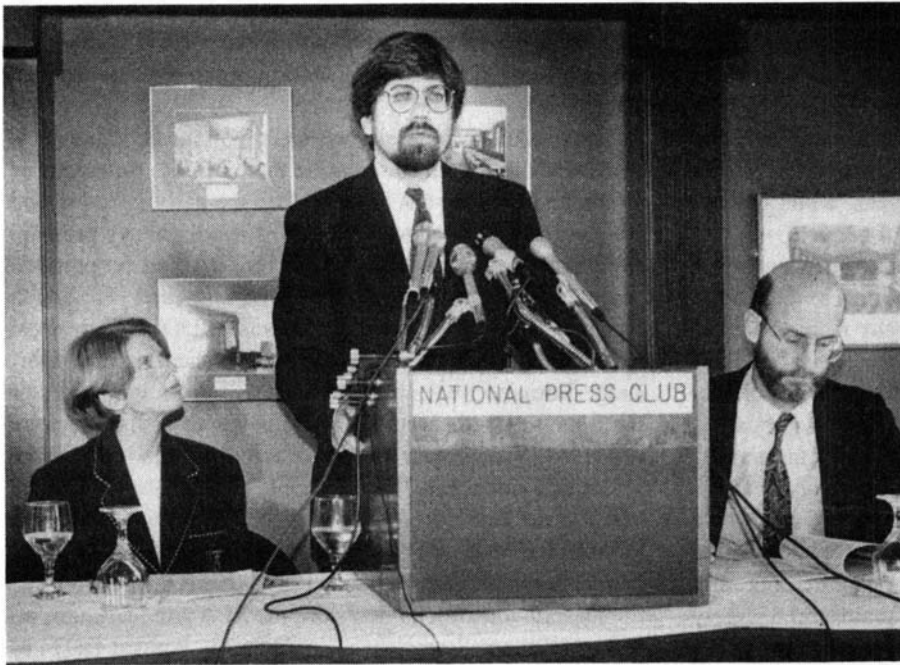
HCFCs, and HBFCs to the list of taxable ozone-depleting chemicals in Code section 4682. The actual cost to the nation of such a tax would be crippling, when measured in food losses and economic losses, and it will *not* protect any lives. Indeed it will damage lives, here in the United States and worldwide.

The proposal of such a tax continues the unscientific flight-forward pattern that has become U.S. policy regarding ozone depletion. This is a policy based on public perception and hypothetical models, not scientific evidence. It is a policy pushed very hard by environmental organizations and some research groups, backed by millions of dollars from foundations and corporations. The alleged dangers of ozone depletion have been repeated so often by these groups and the media that they have come to be accepted as truth, without question.

In this testimony, I would like to raise the questions that I think committee members should address before continuing this ozone flight-forward. My perspective in this is to look at the consequences of the nation's policy on ozone depletion in terms of human lives—how many lives will be lost as a result of these policies. I am not a scientist, but a science writer and editor, and I have considered the evidence presented by many experienced scientists worldwide whose work does not often get printed in the popular press or even the scientific press because it is not "politically correct."

First, what is the worst case scenario if the ozone depletion theorists are correct? They say we will have a 10% ozone depletion within the next 50 years. What does that translate into in terms of the alleged increase in ultraviolet radiation reaching the Earth? It means an increase equivalent to what you would receive if you moved 100 miles or so toward the equator—in other words, from Washington, D.C. to Richmond, Virginia. When we put this to the inventor of the ozone depletion theory, Prof. F. Sherwood Rowland, he acknowledged that this was not something that he would worry about—moving 100 or so miles south.

Clearly this is not a crisis situation for most people but a trivial geographic move. Is such a worst-case ozone-depletion scenario worth the disruption of refrigeration worldwide and trillions of dollars of costs incurred by the ban on CFCs and now the ban on methyl bromide? I think not.



*Some clues as to why the Environmental Protection Agency rushed to ban methyl bromide were provided by a Washington press conference Nov. 12, 1992 given by a coalition of environmental groups. They demanded—with no scientific evidence—a ban on methyl bromide. The demand is part of an overall campaign “to overhaul our chemically dependent farming system.” Not coincidentally, the groups expect that the concomitant drop in agricultural output will help reduce world population.*

*Here, the panel of environmentalist lawyers: (from left) Liz Cook, ozone campaign director for Friends of the Earth; Jay Feldman, executive director, National Coalition Against the Misuse of Pesticides; and David Doniger, senior attorney for the Natural Resources Defense Fund.*

Second, has any increase in ultraviolet actually been measured? No, there is no trend of an increase. The most definitive study by U.S. researchers Scotto and Urban over more than a 12-year period showed no significant trend of increase in UV-B, while some stations showed decrease.

Third, is there significant scientific evidence to indicate that ozone depletion is a natural, seasonal, and cyclical phenomenon that seems to follow the sunspot cycle? Yes, there is. The renowned ozone scientist Gordon Dobson discovered low ozone levels in Antarctica in the 1950s. As his colleague Marcel Nicolet recently testified, they were so startled to find such low levels of ozone that they threw out all the readings below 250 dobson units. French researchers also found such low ozone levels in the 1950s, before the widespread use of CFCs [chlorofluorocarbons]. Today's computer models, based not on observations but on the conjectures of Rowland and Molina, cannot explain why there would be a so-called ozone hole in the 1950s.

Fourth, what about natural sources of chlorine? They admittedly dwarf the man-made sources: There are millions of tons of natural sources (seawater, volcanoes, etc.) but only a few thousand tons of man-made sources. But do natural sources of chlorine reach the stratosphere? Ozone depletion theorists assert that they do not. The evidence indicates that they do. For example, French volcanologist Haroun Tazieff pointed out in a recent interview that in Antarctica the stratosphere is very low (5,000 meters) and the active volcano there, Mt. Erebus, is at a very high altitude (4,000 meters), so that the volcanic emissions indeed reach the stratosphere. Based on studies of the radioactive fallout from the Chernobyl accident, Zbigniew Jaworowski showed definitively that

chlorine and other heavy elements do reach the stratosphere.

There are many more basic questions that could be asked about ozone depletion. I think at best one could say that the science here is uncertain. I would put it more boldly: The science is faulty and in some cases nonexistent. Why is this nation making a policy decision about ozone depletion based on uncertain science or faulty science when the consequences are so drastic? What is certain, is that lives will be lost, as supplies of the benign and cheap refrigerants are cut off, and people here and in the rest of the world will not be able to afford the much more expensive replacements.

### **Methyl bromide crucial to food production**

Methyl bromide is an absolutely essential, ubiquitous, and benign fungicide and fumigant. It is used as a soil fumigant, increasing crop yields by up to 500%. It is also used in the storage and transportation of food, including grains, fruits, nuts, and vegetables to dramatically decrease losses from mold, bacteria, insects and other pests. The capacity to preserve food in a wholesome form until it gets to market is the hallmark of an industrialized nation. A tax on methyl bromide, an essential component of that capacity, will turn a nation from food self-sufficiency to dependence on increasingly scarce and unaffordable food imports.

Banning or taxing methyl bromide will not have any appreciable impact on the amount of methyl bromide in the atmosphere; 300,000 tons a year are produced by marine life in the oceans. Marine microorganisms, seaweed, and marine invertebrates use methylation to eliminate hazardous substances. In the process of methylation, they produce methyl bromide—thousands of tons of it yearly. Many swamp and

bog organisms do the same thing, as do some land plants. Sea salt spray throws 2 million tons a year of bromide into the atmosphere; volcanoes throw an average of 78,000 more tons per year. The net result is that man's use of methyl bromide pales in comparison to natural sources of bromide released in the atmosphere. Natural sources add 2,378,000 tons of bromide to the atmosphere per year, while halons, like methyl bromide, add only 12,040 tons per year.

Banning or taxing methyl bromide out of existence will exacerbate national and global food shortages. This food shortage, which will be hitting Americans in the form of increased food prices within weeks, was generated by disastrous weather here and internationally, coupled with collapsing economic conditions for farming. The process of cartelization of U.S. agriculture is driving many family farmers off the land and replacing them with huge agro-industry farms owned by the leading cartels that market grain and meat. As a result, much of the world is dependent on the very productive Midwest grain belt. The summer floods mean that not only are most of this year's crops lost, but the grain stored largely in that same area from last year's crops—our food reserves—are also largely lost.

Many other countries experienced comparable or worse weather catastrophes that add up to a global food shortage on a scale not seen for decades. Other agricultural areas in the United States have been hit with weather disasters—some from floods, some from droughts—and there are predictions of early frosts.

Where does this leave the issue of protecting the crops that are harvested under these food-scarce conditions? The reality is that in spite of the push to find substitutes, good, economically realistic substitutes for methyl bromide do not exist. Phosphene can replace some uses of methyl bromide, but this is a far more toxic compound. Irradiation and controlled atmospheres could replace some uses of methyl bromide, but the infrastructural capacity does not exist to use these on a wide scale to reduce food spoilage—and it is not likely to be there soon.

Under these disastrous conditions, can Congress possibly afford to tax or ban methyl bromide, and thus allow a good percentage of what is harvested this fall to be wasted by spoilage?

### **The consequences in terms of human lives**

We know that the human consequences of the ban on CFCs and the ban on methyl bromide were not even considered. In fact, *21st Century* asked EPA Administrator William Reilly at a press conference Nov. 12, 1992, whether the EPA had evaluated the consequences worldwide of a phaseout of methyl bromide. They had not! In other words, the EPA was making a decision based on uncertain science and they had not even bothered to assess the damage it would cause. (An hour earlier on Nov. 12, several environmental groups, including Friends of the Earth, the Natural Resources Defense

Council, and a coalition of groups opposing methyl bromide held a press conference demanding that methyl bromide be banned. They also made no mention of the consequences of such a ban.)

How could it be that such an important U.S. policy is made without regard to scientific evidence or consequences to human life? One has to go back to the early 1970s to find the answer to this question. In 1972, under heavy pressure from environmental groups that were waging propaganda campaigns against DDT, the Environmental Protection Agency set up hearings on the effects of DDT. There were seven months of hearings before an EPA hearing examiner, Judge Edmund Sweeney, and scientists from both sides of the issue testified. Nine thousand pages of testimony were produced. The hearing examiner ruled, on the basis of the scientific evidence, that DDT should not be banned. He said "DDT is not a carcinogenic, mutagenic, or teratogenic hazard to man [and] does not have a deleterious effect on freshwater fish, estuarine organisms, wild birds, or other wildlife."

Despite this official decision, the EPA administrator, attorney William Ruckelshaus, unilaterally banned DDT, as of January 1973. Ruckelshaus never attended a day of the hearings and admitted that he never read the testimony. He also admitted that his decision was based on political reasons, not scientific evidence. As a result, millions of people, particularly people of color in Africa and Asia have lost their lives. And to this day one still hears and reads the same fallacious allegations about the harm of DDT that were disproved in the EPA's seven-month hearing in 1972.

I have recounted this DDT history, because I think DDT was the "mother" of many environmental hoaxes over the past 20 years whose consequences kill people. In this sense, the ozone depletion theory is another "son of DDT," and its consequences will also kill people. That is what I would like this committee to consider.

Of course, there are many well-meaning people who do not know this history and who may be genuinely concerned about ozone depletion. But I think that the committee should also be aware that many of the promoters of the ozone depletion theory are environmental extremists and malthusians. Sherwood Rowland, for instance, signed something called the Morelia Declaration. His name was second on the list of signers in a one-third page ad that appeared twice in the *New York Times*. The last paragraph of this Morelia Declaration ad reads: "If the latter half of the 20th century has been marked by human liberation movements, the final decade of the second millennium will be characterized by liberation movements among species, so that one day we can attain genuine equality among all living things."

Such genuine equality of species—where human lives are treated as cheaply as blades of grass—is what we are moving toward by increasing the number of policies based on political perception, not scientific evidence. This is not a practice worthy of this nation—or of this committee.