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METHYL BROMIDE: ARE U.S. INTERESTS BEING SERVED BY THE CRITICAL USE EXEMPTION PROCESS?

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND RESOURCES

OF THE

COMMITTEE ON
GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

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METHYL BROMIDE: ARE U.S. INTERESTS BEING SERVED BY THE CRITICAL USE EXEMPTION PROCESS?

WEDNESDAY, FEBRUARY 15, 2006

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND RESOURCES,
COMMITTEE ON GOVERNMENT REFORM,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:06 p.m., in room 2203, Rayburn House Office Building, Hon. Darrell E. Issa (chairman of the subcommittee) presiding.

Present: Representatives Issa, Watson, and Kucinich.

Staff present: Larry Brady, staff director; Lori Gavaghan, legislative clerk; Tom Alexander, counsel; Dave Solan, Ph.D., and Ray Robbins, professional staff members; Alexandra Teitz, minority counsel; Richard Butcher, minority professional staff member; and Cecelia Morton, minority office manager.

Mr. ISSA. Ladies and gentlemen, I want to thank you all for being here. Please all take seats.

Yes, if the private sector witnesses would also take their place at the table, I would appreciate it.

In the future we may want to schedule these differently, but we had noticed this as a single panel, and with your indulgence, we will go forward that way. I guess officially I will bring this hearing to order.

And to my amazement, a quorum being present, this subcommittee hearing on will come to order.

The subcommittee is conducting this hearing today to highlight the shortcomings or successes of the Montreal Protocol's Critical Use Exemption process with respect to methyl bromide.

This is an issue of paramount importance to my constituents and my ranking member's constituents in southern California, as well as the growers and manufacturers throughout the country.

First let me say that I fully support the Montreal Protocol in its effort to eliminate the use and production of ozone-depleting substances. We have been very successful in this effort. Through the cooperation of the Government and private sector in the United States, we have eliminated the use and production of more than 90 percent of the substances on the Protocol's list. We are working hard to eliminate the last 10 percent, which includes methyl bromide.

In 2007, the United States, it is estimated, will use only 26.25 percent of what it used in 1991. We are continuing our effort to

find substitutes for methyl bromide. To date, the U.S. Government alone has spent more than $200 million in this pursuit, and we understand that the private sector in response has spent at least the same. But a substitute alternative on a universal basis has not been found to date. This is why we have to continue with a critical use exemption for certain categories for which there is no alternative, as afforded under the Montreal Protocol.

However, I am concerned that when put into practice, the critical use exemption process does not work well. The process is lengthy, unpredictable, expensive, and anything but transparent—and I want to emphasize, anything but transparent. Some of our competitors not covered, such as China, India, and Mexico, will not be subject to the Protocol until 2015. Every year we apply, we are authorized considerably less than what our farmers require.

We must ask ourselves: Are U.S. interests adequately served under the critical use exemption process as it currently functions? Should we be subject to international procedures that lack transparency and predictability? Is there anything Congress can do to spur transparency and predictability? Can the process be simplified? Why can't we have a multi-year approach? These are just some of the questions for today.

I hope that the testimony delivered today—and I have read the testimony in advance—will shed some light on the critical use issue and suggestions for improvements, and particularly in the question-and-answer period. I hope that this panel will suggest improvements that you believe would help in this process.

[The prepared statement of Hon. Darrell E. Issa follows:]

COMMITTEE ON GOVERNMENT REFORM
SUBCOMMITTEE ON ENERGY AND RESOURCES

OPENING STATEMENT OF
CHAIRMAN DARRELL ISSA

"Methyl Bromide: Are U.S. Interests Being Served by the Critical Use Exemption Process?"

FEBRUARY 15, 2006

The Subcommittee is conducting this hearing today to highlight the shortcomings of the Montreal Protocol's Critical Use Exemption process with respect to Methyl Bromide.

This is an issue of paramount importance for my constituents in Southern California, as well as for growers and manufacturers throughout the country.

First let me say that I fully support The Montreal Protocol and the effort to eliminate the use and production of ozone depleting substances. We have been very successful in this effort. Through the cooperation of government and private institutions, the U.S. has eliminated the use and production of over 90% of the substances on the Protocol's list. And we are working hard to eliminate that last 10%, which includes Methyl Bromide.

In 2007, we in the U.S. will only use 26.25% of what we used in 1991. We are continuing our efforts to find a substitute. To date, the U.S. government alone has spent over $200 million in this pursuit. We understand that the private sector has responded with nearly the same investment. But a suitable alternative has not been developed. This is why we avail ourselves of the Critical Use Exemption process afforded by the Montreal Protocol.

However, I am concerned that when put into practice, the critical use exemption process does not work well. The process is lengthy, unpredictable, expensive and anything but transparent. Some of our competitors – China, India and Mexico – will not be subject to the Protocol until 2015. And every year we apply, we are authorized considerably less than what our farmers require.

We must ask ourselves, are U.S. interests adequately served under the Critical Use Exemption process as it currently functions? Should we be subject to international procedures that lack transparency and predictability? Is there anything Congress can do spur transparency and predictability? Can the process be simplified? Why can't we have a multi-year approach?

I hope that the testimony delivered today will shed light on this critical issue and suggestions for improvement will be forthcoming.

I ask for unanimous consent that the briefing memo prepared by the Subcommittee staff be inserted into the record at this point.

Mr. ISSA. We have a very distinguished public and private panel today. First of all, we have Mr. William Wehrum, Acting Assistant Administrator for Air and Radiation, U.S. Environmental Protection Agency, and thank you for being here.

We have Ms. Michelle Castellano, vice president, Mellano & Co. from San Luis Rey, CA, and I do have to once again thank you as a constituent and as a major employer in my district. Your family has been very generous in working on this issue both here and overseas.

Mr. James Bair, vice president of North American Millers' Association, again, a returnee of many contributions to the committee.

Finally, Mr. David Doniger, senior attorney, the Natural Resources Defense Council. I have been particularly interested in your submittals. They are extensive, and I look forward to our question-and-answer period. I also understand that you will have some documents to submit, and that will be allowed under unanimous consent.

I look forward to hearing testimony from this panel. I ask unanimous consent that the briefing memo prepared by the subcommittee staff be inserted into the record, as well as other relevant materials, including any materials which you recognize and elect to have during your testimony.

[The information referred to follows:]

COMMITTEE ON GOVERNMENT REFORM
Subcommittee on Energy and Resources
DARRELL ISSA, CHAIRMAN

Oversight Hearing:

Methyl Bromide: Are U.S. Interests Being Served by the Critical Use Exemption Process?

February 15, 2006, 2:00pm
Rayburn House Office Building
Room 2203

BRIEFING MEMORANDUM

INTRODUCTION

In response to emissions of certain chemicals which contributed to the depletion of the Earth's stratospheric ozone layer, the United States entered into the 1987 Montreal Protocol (the "Protocol"), the aim of which was the gradual elimination of the use, production, and trade of so-called Ozone Depleting Substances. Methyl Bromide was identified as one such substance in 1992, and it is regulated globally under the Protocol, as amended in 1992 and adjusted in 1997, and domestically under Title VI of the U.S. Clean Air Act, as amended in 1993 and in 1998.

Methyl Bromide is a widely used biocide in the U.S. agricultural community because of its effectiveness at killing insects and plant pathogens. Accounting for 40% of global usage, U.S. farmers use it extensively for pre-planting, post-harvest, quarantine, and pre-shipping treatments. The use and production for anything other than quarantine and pre-shipment was to be completely phased-out for non-developing nations under the Protocol by January 1, 2005.[1]

It was hoped that the phase-out would allow the agricultural industry to continue to use Methyl Bromide, while at the same time, force it to seek out and use suitable alternatives. In addition to the millions invested by the private sector, the U.S. government has spent over $200 million in research and development in pursuit of a substitute for Methyl Bromide. To date, a suitable, wide-scale alternative has yet to emerge[2] and the need for Methyl Bromide is as critical as ever. The Protocol provides for an exemption from the phase-out deadline.

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[1] Developing nations are exempt from the January 1, 2005 deadline.
[2] There are a number of proposed alternatives, but none reaches the effectiveness level of Methyl Bromide.

The United States has applied for three Critical Use Exemptions since 2003. The lead agencies (EPA, USDA, and the State Department) are somewhat comfortable with the application process. The private sector, on the other hand, believes that international parties may be using the Protocol and the Critical Use Exemption process as a way to gain a competitive edge on the U.S. agricultural industry. Both agree, however, that there is considerable room for improvement, especially in the areas of transparency, predictability, and timeliness of the rulemaking process.

This hearing will examine the Critical Use Exemption application process and whether United States interests are adequately protected.

BACKGROUND

Methyl Bromide is a gaseous chemical that is highly effective at killing molds, other fungi, insects, and worm (nematode) infestations of crops. It is widely used by U.S. growers to treat soils prior to planting, to treat post-harvested commodities such as fruits, vegetables, dried foodstuffs, stored grains, cut flowers, and timber, and for quarantine and pre-shipment treatments for import/export. Its ozone depleting properties qualify it as an ozone depleting substance under the Montreal Protocol, and correspondingly so under Title VI of the Clean Air Act.[3] Its use and production, other than for quarantine and pre-shipment, were scheduled for complete phase-out by January 1, 2005.

The U.S. has complied with the phase-out process, but has been unable to fully wean itself off the use of Methyl Bromide because its effectiveness is unparalleled and there is no alternative available that can be used in the same fashion as Methyl Bromide. In 2007, the U.S. will use 73.75% less than the amount of Methyl Bromide it consumed in 1991.[4] To date, the U.S. government and private institutions have invested well in excess of $200m in research and development to find alternatives to Methyl Bromide so it can reduce this amount to 0%. Unfortunately, a suitable replacement has yet to emerge though numerous attempts have been made.[5] As such, the U.S. is forced to apply for Critical Use Exemptions to the Montreal Protocol on an annual basis to allow it to continue to use and produce Methyl Bromide.

THE CRITICAL USE EXEMPTION PROCESS

The Protocol, as amended in 1998, allows countries to continue to produce and use Methyl Bromide, via a Critical Use Exemption, beyond the January 1, 2005 phase-out

[3] Title VI of the Clean Air Act enforces the Montreal Protocol.

[4] The amount of Methyl Bromide consumed in 1991 is also known as "baseline". For example, 26.25% of baseline is equal to 26.25% of the amount of Methyl Bromide used in 1991. Baseline is used as a reference point by which to track Methyl Bromide reduction under the Protocol.

[5] Since 1995, there have been 10 new registrations for "niche" uses: Phosphine (insects in stored products); 1,3-D (application via drip); Halosulfuron (weeds in fruiting vegetables); s-Metolachlor (weeds in tomatoes); Sulfuryl Flouride (insects in stored grains, dried fruit, nuts, mills); Idomethane (tomatoes, strawberries, pepper and ornamentals); Sodium Azide (ornamentals and turf); and Furfural (greenhouse, turf and ornamentals)

deadline. The annual process, which requires close to 20,000 man hours and millions of dollars, contains several steps and begins two years prior to the target usage year. Step one is the application phase, step two is the review phase, step three is the final determination made by the Meeting of the Parties, and step four is the rulemaking phase.

The U.S. application process begins with the individual farmer. Growers prepare a very detailed application for EPA, setting out their efforts to find alternatives, the reasons why alternatives do not work, if in fact they do not, and the economic reasons why they must continue to use Methyl Bromide. In addition, they provide, based upon past usage, an estimate of the amount of Methyl Bromide they intend to use. Grower coalitions, such as the California Strawberry Commission, submit the applications to the EPA on behalf of their members.

The EPA reviews and as necessary supplements this information and determines what amount of Methyl Bromide the U.S. should ultimately request. This is called the nomination. From there, the State Department submits the nomination package to the Secretariat for the Montreal Protocol (not U.N. affiliated) for initial review by the Methyl Bromide Technical Options Committee ("MBTOC"). It is important to keep in mind that the United States is the only party to the Montreal Protocol that submits its Critical Use Exemption application with such detail and precision.

MBTOC examines the percentage of baseline requested in light of technical feasibility. To this end, it determines whether the U.S. has pursued technically viable alternatives for the use in the context of the application, whether there is a continued effort to limit emissions, and whether there is a continued effort to find alternatives. At the conclusion of this study, they make a recommendation, which may be higher or lower than the percentage requested, and submit it to the Technical Economic Assessment Panel ("TEAP") for its review.

TEAP examines the application in light of economic feasibility. To this end, TEAP will consider whether there are any economically viable alternatives, and whether the absence of Methyl Bromide would cause a significant market disruption. At this time, MBTOC and TEAP may request additional information or seek clarification from the U.S. team.

Ultimately, TEAP will make what they consider to be an appropriate baseline percentage recommendation, which again may be higher or lower than the nomination, to the Meeting of the Parties ("MOP").

The MOP is tasked with considering the recommendations of the MBTOC and TEAP, on the one hand, and the nomination from the U.S., on the other, in light of policy concerns. Like MBTOC and TEAP, MOP is comprised of representatives from member countries, including the United States. But unlike MBTOC and TEAP, it is the final arbiter and it can either accept or reject the recommendations by MBTOC and TEAP.[6] This meeting is held behind closed doors and the final rule cannot be appealed.

[6] It can also accept in part, and reject in part. For example, for 2005, it authorized 37.5% of baseline, but mandated that 7.5% be drawn from stocks.

Once MOP grants a CUE and a corresponding baseline percentage, the EPA must promulgate a rule in accordance with Title VI of the Clean Air Act. To this end, it must engage in a lengthy notice and comment period. For example, the EPA just released the rule for the 2006 nominations in January 2006. This should have been completed sometime during the 4th Quarter of 2005, so both the users and producers could plan their planting accordingly.

The United States has had considerable experience with the Critical Use Exemption process.

U.S. EXPERIENCE WITH CRITICAL USE EXEMPTIONS

The United States has applied for three Critical Use Exemptions and is in the process of applying for a fourth. The following chart shows what percentage of baseline was nominated by the U.S. and what percentage the MOP authorized for each year.[7]

Abbreviations:
MOP: Meeting of the Parties (the annual meeting)
Ex-MOP: Extraordinary Meeting of the Parties (when the MOP meets more than once a year to review or resolve difficulties with nominations)

Year	Amt. Nominated	Amt. Authorized	Date of Authorization
2005	39%	35%	1st Ex-MOP (Mar. 2004)
2005 Supplemental	2.5%	2.5%	16th MOP (Nov. 2004)
TOTAL		**37.5%**	
2006	35%*	32%	16th MOP/2nd Ex-MOP (July 2005)
2006 Supplemental	.03%	.03%	17th MOP (Dec. 2005)
TOTAL		**32.03%**	
2007	29%	26.4%	17th MOP (Dec. 2005)
2008	25%	n/a	n/a

*While 37% was originally nominated for 2006, the number was later revised down to 35% due to recommendations from the Methyl Bromide Technical Options Committee (MBTOC).

[7] Source: Environmental Protection Agency.

These percentages can be further broken down into the percentage to come from new production and the percentage to come from available stocks. For each year, those percentages are:

Year	New Production Authorized	Amt. to be Supplemented by Stocks
2005	30%	7.5%
2006	27%	5.03%
2007	20%	6.4%

The government, as well as the private sector, has encountered considerable difficulty with the Critical Use Exemption process.

LIMITATIONS OF THE CRITICAL USE EXEMPTION PROCESS

Both the government and the private sector have expressed concerns over the Critical Use Exemption process. These are:

- **Lack of Transparency.** There is considerable uneasiness over the lack of transparency in the MOP's decision making process. As outlined above, this meeting is held behind closed doors and the final ruling cannot be appealed. The U.S. cannot represent itself and there are no transcripts available for review. This causes great concern because there is no way to determine the basis of the MOP's decision. Consequently, the U.S. can only trust that the MOP bases its decision upon sound public policy. Some find this difficult to swallow, however, especially when member countries serving on the MOP also compete with the U.S.' agricultural market. Could they be declining to authorize the nominated amount of Methyl Bromide to gain a competitive edge? Also, if the full amount of Methyl Bromide is not authorized, how is the U.S. supposed to know where it went wrong in its application phase?

- **Lack of Predictability.** The lack of transparency also fosters a lack of predictability in the authorization process. Granted, the purpose of the Montreal Protocol is the gradual elimination of certain ozone depleting substances, namely, Methyl Bromide, and those responsible for its enforcement should accomplish this by reducing the authorized amount each year. The problem is that there is no set reduction amount, and there is no pattern by which the U.S. can predict the amount likely to be authorized in the future. This leaves the U.S. and its growers in a perpetual state of uncertainty.

- **Appeals Process.** As previously stated, the MOP meets behind closed doors and its decision cannot be appealed. Consequently, the U.S. never knows why the MOP consistently grants less than the nominated amount and even if it did, it could never appeal the decision. As such, the U.S. must accept the decision on its face without ever knowing the MOP's reasoning. This is inefficient,

particularly when the annual Methyl Bromide authorization is so critical to the functions of the U.S. agricultural industry.

- **Stocks.** Many growers are concerned about the use of stocks to supplement the authorized baseline percentage. The MOP's practice has been to authorize an amount of Methyl Bromide to be produced and consumed, but then out of that total, mandate that a certain percentage of baseline be taken from Methyl Bromide stocks around the country. There are two problems with this. First, many producers do not believe that the Protocol contemplates the use of stocks to supplement baseline percentage and anything to the contrary is merely an artificial production cap. For example, in 2005 the MOP decided that U.S. production and consumption of Methyl Bromide should be limited to 37.5% of baseline. Out of this, it mandated that 7.5% should come from stocks. Producers deem this to be the MOP's attempt to artificially curb production by the amount of Methyl Bromide believed to be held in stocks. This problem is only further intensified by the fact that nobody really knows how much Methyl Bromide is in stock because it is so widely used throughout the country. This creates another problem in that not only are the producers capped, but if it should turn out that the U.S. does not have enough in stocks to cover the percentage, the growers will not have enough to use *and* the producers will not be able to make up for the shortfall.

- **Lack of Efficient Administrative Process.** There is also great concern over the rulemaking process as provided by Title VI of the Clean Air Act. In order to put the authorized use and production percentages into practice, the EPA must issue a rule. This process, however, consumes the better part of seven months to complete because the EPA must engage in a lengthy notice and comment period. The problem is that the EPA does not begin the notice and comment period until after the MOP has published the authorized amounts. This does not give farmers enough time to plan for the target year. For example, the EPA rule announcing the 2006 authorization was not published until January 26, 2006. This means that growers throughout the nation did not know whether, and in what amount, they could use Methyl Bromide for nearly the entire month of January.

PROPOSED LEGISLATION

On March 10, 2005, Rep. George Radanovich introduced H.R. 1257, which proposed to amend the Clean Air Act to authorize critical use exemption amounts for Methyl Bromide as identified by the U.S. State Department for the years 2006 and 2007. This approach, also known as a multi-year approach, would allow the EPA to promulgate one rule that regulates multiple years of authorizations instead of engaging in a lengthy rulemaking process on an annual basis. As it stands, growers are only guaranteed usage from one calendar year to the next. Though only for the years 2006 and 2007, this bill would have provided growers with more stability and predictability when planning how to use their Methyl Bromide allotments. It was also hoped that with an extra year of breathing room, growers would branch out and test new products while having the safety

net of Methyl Bromide. Moreover, a multi-year approach would save a considerable amount of money and effort.

ISSUES TO BE ADDRESSED AT THE HEARING

- Whether U.S. interests are served by the Critical Use Exemption process;
- Whether, through the Critical Use Exemption process, the Protocol itself strikes the right balance between safeguarding the environment and protecting the U.S. agricultural economy;
- Whether, and to what extent, new legislation is necessary to facilitate the EPA rulemaking process; and
- Whether it is possible to achieve transparency and predictability in the Critical Use Exemption process through "multi-year" legislation.

WITNESSES

- William Wehrum, Acting Assistant Administrator for Air and Radiation, U.S. Environmental Protection Agency

- Michelle Castellano, Vice President, Mellano & Company (San Luis Rey, CA)

- James Bair, Vice President, North American Millers' Association

- David Doniger, Senior Attorney, National Resources Defense Council

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Mr. ISSA. I now yield to the ranking gentlewoman from California for her opening statement.

Ms. WATSON. I sincerely want to thank our chairman for this hearing.

On April 5, 1988, President Ronald Reagan signed the Montreal Protocol on substances that deplete the ozone layer. On October 26, 1990, the House of Representatives voted 401–25 to pass the Clean Air Act and implement the Montreal Protocol. On November 15, 1990, President George Bush, Sr., signed into law the implementing legislation for the Montreal Protocol. Most importantly, the Protocol has enjoyed the bipartisan backing of four consecutive Presidents.

According to the National Resources Defense Council, methyl bromide is the most dangerous ozone-destroying chemical still in widespread use. The NRDC further states that methyl bromide has also been linked to the increased rates of prostate cancer in pesticide applicators and other agricultural workers, not to mention skin cancer and cataract cases that are directly linked to a weak ozone layer.

For 16 years, the Montreal Protocol has been working to phase-out ozone-depleting chemicals and to protect and restore the ozone layer. The United States demonstrated that we were able to work together with the international community to answer an environmental problem that threatened the entire planet. According to the Protocol, the use of methyl bromide was supposed to be reduced to zero by the year 2005. For the past 3 years, the United States and a few other countries have requested exemptions from the Protocol for so-called critical uses.

The subject of this methyl bromide hearing is: Are U.S. interests being served by the critical use exemption process? Unfortunately, we as Americans tend to look at some issues through a very narrow window. If we want to be critical of an agreement with the world, especially what is considered to be the most effective and beneficial environmental world treaty thus far, one must examine all sides of the issue.

Representative Radanovich has introduced legislation in the 108th and 109th Congress that had authorized methyl bromide use regardless of the Montreal Protocol. The bill is a threatening measure to be utilized if all of the U.S. critical use exemptions are not issued by the Montreal Protocol parties. Congress can move legislation to grant exemptions presumably even if it takes the United States out of compliance within the Montreal Protocol.

My concern: What is the science, legal, and international ramifications behind such an initiative? Many believe that the Montreal Protocol has the flexibility necessary to address appropriate needs for methyl bromide until alternatives are identified. We have every reason to believe that the exemption process works. After all, the United States was a leader in developing and drafting every detail of the Protocol.

Mr. Chairman, to question the critical use exemption methodology of the Montreal Protocol is a commendable oversight practice, but my constituents want to know if there is a reason that is backed by scientific, empirical evidence behind that thought. Several agricultural interests, including some in my own home State

of California, have initially bought into the "whatever the United States wants" with methyl bromide initiatives. It is our duty to question if American economic interests are balanced with the interests of the United States and the world human health, the United States and world environmental health, and, last but not least, the health of U.S. foreign policy. As a former Ambassador, I fully understand the importance of being American while embracing the world we live in.

Mr. Chairman, I want to commend you again on this hearing. American citizens need answers. It is critical that we find a solution to the methyl bromide dispute and develop any environmentally sound alternatives that we can. It is imperative for our economy and for the independence of our great Nation, and I hope this hearing will demonstrate how unwise it would be for the House of Representatives to walk down a path that violates international law, threatens the repair and the healing of the ozone layer, and adds risk to the health of many Americans.

I look forward to this informational session with the U.S. Environmental Protection Agency, the National Resources Defense Council, the North American Millers' Association, as well as representatives from industry. Mr. Chairman, I yield back the remainder of my time. Thank you.

Mr. ISSA. Thank you. Mr. Kucinich, I really appreciate your interest in this and yield you such time as you may need.

Mr. KUCINICH. Thank you, Mr. Chairman. I want to thank you for calling this hearing. I have a delegation from the Ohio National Guard coming to my office shortly, and I would appreciate your indulgence if I could read a statement and then return to my office for the meeting. So thank you, and it is a pleasure to serve with you on this committee, and thanks to the gentlelady, the ranking member.

I was dismayed when I learned that today we would be discussing efforts to perpetuate and possibly increase the use of methyl bromide. Continuing to allow it to be manufactured and used is bad for the environment, bad for human health, bad for international relations, bad economics, and is simply unnecessary.

Methyl bromide has been responsible for a significant amount of the degradation of our protective ozone layer. In 2005, the size of the resulting hole in that layer over the Antarctic reached 9.4 million square miles, an area almost as big as the combined areas of the United States and Canada, according to the NASA. Current estimates say that it will take another 50 years for the hole to repair itself.

Too much ultraviolet B, which is filtered by the ozone layer, causes cataracts and suppresses immune systems, making us more vulnerable to viruses and bacteria, and contributes to skin cancer. It is this threat to human health that is the major reason why the international community agreed to ban methyl bromide. It was a display of unprecedented cooperation in the face of an environmental threat.

Methyl bromide puts their own workers and consumers at risk, too. It is no wonder that it causes chronic health problems for the workers who apply it and the nearby communities who are exposed to it. Exposure has effects on the neurological system, including

functional impairment, lethargy, twitching, tremors, and paralysis in extreme cases. It has also been linked to prostate cancer and birth defects in some studies.

Continuing to manufacture methyl bromide is bad economics. Since the international community agreed to phaseout methyl bromide, companies who play by the rules have been planning for its phaseout. They have incurred real financial costs by investing in alternatives, anticipating the phaseout required by the Montreal Protocol. Failing to adhere to the U.S. promise to phaseout methyl bromide puts these companies who are playing by the rules at an unfair competitive disadvantage. Those who do the right thing and obey the law should be rewarded for their good-faith efforts, not punished.

Consider the international implications as well. An attempt to let the United States allow methyl bromide to be used without going through the specified channels like other countries are required to do would further harm our standing in the international community. It also sends a signal to other countries that we will only honor our agreements until we change our mind. It harms negotiations on future agreements.

The EPA is currently trying to address the methyl bromide issue by substituting chemicals, like methyl iodide, that aren't as harmful to the ozone layer but are still highly toxic. Instead, we need to look at alternatives for pest control that not only preserve the ozone layer, but also protect workers' health, community health, consumer health, and ecological health. In fact, that is exactly what Americans want.

One of the biggest growth industries right now, for example, is organic food. According to the Congressional Research Service, "The annual rate of market growth since 1990 has remained steady at about 20 percent." When given a choice between food grown with toxic chemicals or food grown organically, people choose the latter, especially when the price is comparable, which is increasingly the case as the economies of scale are becoming more prevalent.

One of methyl bromide's biggest uses is for strawberry crops. Jake Lewin, Director of Marketing for the California Certified Organic Farmers, says, "Strawberries can be grown without pesticide. We have 60 growers who don't use methyl bromide. The bottom line is small, and large growers have successfully produced strawberries without pesticides." And that, by the way, is from the Santa Cruz Sentinel. I have the citation for the record.

So we are talking about yielding to the management of chemical producers and agribusiness, who, by the way, rarely have to apply the toxic pesticide themselves or live in adjacent communities, at a drastic cost to our health and that of the Earth. It speaks to the systematic deference to corporations at the expense of the biological systems on which we intimately depend for life. So I say this policy is unwise and unnecessary, and I call for the immediate and permanent phaseout of methyl bromide.

Mr. Chairman, I want to thank you for giving me the opportunity to read this statement.

Mr. ISSA. I want to thank you for your participation, and anything you want to place in the record, for the next 2 weeks it will be left open.

Mr. KUCINICH. Thank you, Mr. Chairman.

Mr. ISSA. And give my best to, as a former Ohioan, our National Guard.

Mr. KUCINICH. I will do that, and I will let them know that you were kind enough to indulge my reading this statement.

Mr. ISSA. Not a problem, Dennis.

Before I hear your testimony, it is the rule of this committee that all people participating in the hearing, whether as witnesses or in support staff that may either advise or testify, be sworn in. So I would ask not only our witnesses but any supportive staff to please stand for the oath.

[Witnesses sworn.]

Mr. ISSA. Let the record show everyone answered in the affirmative. Please be seated.

Before we hear your testimony, I would like to say two things. First of all, absolutely everything in your written statement will be in the record. We will also allow for additional material and additional response to material that is submitted. We want this record to be as full and complete as possible. I will hold open the record—and I will say it again at the end—for at least 2 weeks, but if necessary, longer. This is an extremely important subject. We are absolutely dedicated to the elimination of methyl bromide. This hearing is about how to do it and how to make the system work properly. We are open to hearing about alternatives and the progress on alternatives. So although the scope is relatively narrow because there is only so much time, we are going to allow for an expansion of the record so that we can be as complete as possible. That is with unanimous consent by my ranking member.

So feel free in your 5 or so minutes to go off of your prepared statement knowing it is going to be in. Additionally, it is a single panel, so we do not plan on cutting anyone short. If other Members come in, they will be able to ask plenty of questions. Again, this is very important on a bipartisan basis that it be a very complete record.

So, Mr. Wehrum, you are first. Thank you.

STATEMENTS OF WILLIAM L. WEHRUM, ACTING ASSISTANT ADMINISTRATOR FOR AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY; MICHELLE M. CASTELLANO, ATTORNEY AND VICE PRESIDENT, MELLANO & CO., SAN LUIS REY, CA; JAMES A. BAIR, VICE PRESIDENT, NORTH AMERICAN MILLERS' ASSOCIATION; AND DAVID DONIGER, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL

STATEMENT OF WILLIAM L. WEHRUM

Mr. WEHRUM. Thank you, Mr. Chairman, Congresswoman Watson. I appreciate the opportunity to be here to testify. It is a privilege. I am here on behalf of three Federal agencies—the Department of State, the Department of Agriculture, and the Environmental Protection Agency—to discuss the methyl bromide critical use exemption process under the Clean Air Act and Montreal Protocol.

I recognize this issue is of great importance to you and many of your constituents.

Since the Montreal Protocol's inception in 1987, the United States has exerted strong global leadership in the transition away from ozone-depleting substances and toward the development of new technologies that are safe for the ozone layer. We continue to meet all of our obligations under the Montreal Protocol and have successfully phased out most ozone-depleting substances controlled by the Protocol.

Because of the U.S. Government's commitment and our innovative domestic industries, the world is well on its way to seeing the recovery of the stratospheric ozone layer. We estimate that full implementation of the Montreal Protocol will save 6.3 million U.S. lives that would otherwise have been lost to skin cancer between 1990 and 2165.

Pursuant to the Montreal Protocol and Title VI of the Clean Air Act, methyl bromide, like other ozone-depleting substances, has been subject to a gradual step-by-step phaseout with certain allowable exceptions. Today's discussion will focus on the critical use exemption, or CUE process, which allows parties to identify crops and uses for which there are no technically and economically feasible alternatives. The CUE process essentially allows on a yearly basis the production and import of new methyl bromide for such uses after the Montreal Protocol's phaseout date of January 1, 2005.

The CUE process begins when EPA solicits applications for methyl bromide users for their critical use nomination, or CUN. I am from EPA, so we are into acronyms. EPA conducts a technical review of the applications, and the U.S. Government then submits a CUN to the parties of the Protocol approximately 2 years before the control period in which the CUE will be produced.

A technical committee called the Methyl Bromide Technical Options Committee [MBTOC], reviews this U.S. CUN and provides recommendations to the Protocol parties. Parties then act to authorize the CUEs. Finally, EPA allocates the CUEs through a notice and comment rulemaking process.

Since the CUE process has been implemented under the Protocol and the Clean Air Act, the United States has consistently received over 90 percent of the amount we nominated for consideration by the parties to the Protocol. I believe this is a tribute to the strength of the data and technical information that the United States has assembled for its nominations. To date, EPA has completed action on rulemakings to provide CUEs in 2005 and 2006. The agency is now preparing a proposal to implement decisions regarding methyl bromide taken at the last meeting of the parties in Dakar, Senegal, in December 2005. This rulemaking will address CUEs for the year 2007. The United States also recently submitted its CUN to parties for methyl bromide production in 2008.

Although there continues to be room for improvement, we believe that both the international and domestic processes for developing and allocating critical use exemptions are working well and that the CUE process yields an annual amount of methyl bromide to meet the critical needs of U.S. farmers while continuing to show steady gains in protection of human health.

While there is no silver bullet, that is, no currently approved alternative to methyl bromide that can substitute for methyl bromide in all uses, some alternatives have been developed, and more are under review. My written testimony contains a list of substances that have been approved and are making inroads in the marketplace in combination with or instead of methyl bromide, thereby reducing overall methyl bromide use. Altogether, the United States has taken the lead in finding alternatives to methyl bromide, and EPA continues to give highest priority to the registration of alternatives to this chemical, including iodomethane, a highly promising potential replacement for important soil uses of methyl bromide.

Mr. Chairman, we don't claim that the process for determining CUEs for methyl bromide is perfect or that everything has run completely smoothly, but we have worked with other Protocol countries to make improvements. For example, in 2004, we collaborated with the other parties to revise the guidelines used by the MBTOC to provide a more transparent and well-defined process for the MBTOC to review nominations. The success of this effort is illustrated by the fact that for the first time, MBTOC's critical use recommendation for the United States had no material in the "unable to assess" category. This timely approval will allow the U.S. regulatory process to move forward.

Mr. Chairman, the U.S. positions in recent meetings of the parties have demonstrated the administration's strong commitment—strong continued support for the Montreal Protocol, as well as our commitment to the phaseout of methyl bromide as technically and economically feasible alternatives become available for U.S. growers and other users of methyl bromide.

Altogether, we believe it is vital to work with Congress and the community affected by the methyl bromide phaseout to ensure that our implementation of the Protocol and the CUE process continues to be successful.

I would be pleased to answer any questions you may have, and again, thank you for the opportunity to be here. It is a privilege.

[The prepared statement of Mr. Wehrum follows:]

TESTIMONY BEFORE
SUBCOMMITTEE ON ENERGY AND RESOURCES
HOUSE COMMITTEE ON GOVERNMENT REFORM

February 15, 2006

STATEMENT OF WILLIAM L. WEHRUM
ACTING ASSISTANT ADMINISTRATOR, AIR AND RADIATION
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

I. INTRODUCTION

Mr. Chairman, members of the Subcommittee, thank you for the opportunity to deliver this statement on behalf of three Federal agencies--the Department of State, the Department of Agriculture, and the Environmental Protection Agency. We recognize that methyl bromide, and the implementation of the Clean Air Act (CAA) and Montreal Protocol, are issues of great importance to you and many of your constituents. I would like to first provide a brief overview of our ongoing efforts to protect the ozone layer and then discuss the critical use exemption (CUE) process for methyl bromide (MeBr).

II. PROTECTING PUBLIC HEALTH, THE ENVIRONMENT, AND U.S. BUSINESS INTERESTS

Since the Montreal Protocol's inception in 1987, the United States has exerted strong global leadership in the transition away from ozone-depleting substances and toward the development of new technologies that are safe for the ozone layer. The U.S. continues to meet all of its obligations under the Montreal Protocol. Further, the U.S. continues to invest heavily in the development and deployment of alternatives.

A major goal of both the Montreal Protocol and the CAA is to protect the public from skin cancer caused by excess harmful ultraviolet radiation reaching the Earth's surface through a depleted ozone layer. EPA works to provide the public with information on how to reduce overexposure to UV radiation and control the chemicals that damage the stratospheric ozone layer. EPA's public information efforts were recognized by the Cancer Research and Prevention Foundation's Congressional Families Action for Cancer Awareness, which cited our SunWise School Program for excellence in 2003. An EPA study estimated that full implementation of the Montreal Protocol would prevent 6.3 million cases of skin cancer from 1990 to 2165.

The 2002 Scientific Assessment of Ozone Depletion, a comprehensive overview of the state of the ozone layer involving the work of hundreds of atmospheric scientists, life scientists, and researchers worldwide, with significant U.S. participation, found that the ozone layer continues to be susceptible to damage. Although we are currently on track for full recovery of the ozone layer if we stay the course. However, the stratospheric concentration of ozone-depleting chlorine is presently at or near its peak and

the concentration of bromine in the stratosphere continues to increase. As a result, seasonal ozone depletion in the Antarctic continues and some of the largest and deepest holes on record have occurred in the first years of this decade.

As a result of the Montreal Protocol and its implementation pursuant to Title VI of the Clean Air Act, many businesses invested heavily in alternatives that do not damage the ozone layer. The substantial financial commitment by U.S. companies has generated an estimated $10 billion dollar business in trade with ozone-safe American products and technologies that could be at risk if the U.S. were to take action inconsistent with its commitments under the Montreal Protocol. For all of these reasons, this Administration remains committed to finishing the job of restoring and protecting the ozone layer, a job first undertaken by President Ronald Reagan.

III. THE CRITICAL USE EXEMPTION PROCESS: BACKGROUND

That brings me to the topic of today's hearing, the critical use exemption (CUE) process for methyl bromide (MeBr). The title of today's hearing is the right place to start: it asks whether U.S. interests are being served by the CUE process. I particularly note the Subcommittee's use of the plural for the word interests, which I applaud because we agree that there are really two important interests here for the U.S.: protecting public health and assuring that our growers' critical needs and the needs of the food processing industry for MeBr are met as they make the transition to alternatives. I believe that both of these U.S. interests are being served by the CUE process, and I would like to spend the bulk of my testimony explaining why. But I need to first step back and explain the Montreal Protocol framework in which the CUE process fits.

Title VI of the 1990 Clean Air Act Amendments required EPA to phase-out, within seven years, the production and import of any newly-identified substance with a significant potential to damage the ozone layer. In 1991, EPA received a petition to list methyl bromide and in response, the Agency promulgated a rule, in conformance with the CAA requirement, that established a U.S. phase-out date of 2001 for MeBr without any exemptions. In 1997, the U.S. and the Montreal Protocol Parties agreed a full phase-out of MeBr in 2005, with interim reductions in 1999, 2001, and 2003, and with newly established exemptions. In 1998, Congress amended the CAA to conform the U.S. phase-out schedule to that of other developed country Parties to the Montreal Protocol, resulting in the phase-out schedule we have today.

There are three major exemptions to the MeBr phaseout: 1) quarantine and preshipment; 2) emergencies; and 3) critical uses. While I will only address critical uses of MeBr in today's testimony, I would briefly note that the quarantine and emergency exemptions allowed by the Montreal Protocol serve important U.S. interests with respect to trade (in controlling harmful and invasive pests) and addressing emergency situations. The critical use exemption (CUE) allows any developed country that is a Party to the Protocol to seek an exemption from the MeBr phase-out if it determines that the absence of MeBr would cause a significant market disruption and that there are no technically and economically feasible alternatives for the use in the context of the application. The

Parties may then approve the critical use if the Party continues to make efforts to find alternatives, strives to minimize use and emissions, and MeBr is not available in sufficient quantity and quality from existing stocks.

Many countries have sought CUEs for MeBr. The U.S. is one of 17 countries that have submitted annual critical use nominations (CUNs). Some national requests have been very small, covering only one use, and some have been large, covering 10 or more uses. The amount of MeBr nominated by the U.S. was between about 9,900 and 6,400 metric tonnes for 2005, 2006, 2007 and 2008—this translates to between 39 percent to 25 percent, respectively, of our 1991 baseline consumption level for MeBr.

The U.S. Government has developed each annual CUN through a rigorous technical process involving the careful efforts of many technical experts. For the most recent 2008 nomination, for example, EPA's Office of Pesticide Programs, with collaboration from the USDA, worked intensively with growers and food processors to fully understand genuine critical needs in various states and agricultural sectors. This allowed expert scientific and economic staff to develop technically supported estimates for U.S. critical needs for 2008 that were then shared with policymakers through an interagency process involving the State Department, USDA, EPA, USTR, OMB and the Council on Environmental Quality. Each year's technical estimate has been lower than the previous year's for various reasons including that some sectors have switched to alternatives, some sectors have dropped out altogether if they do not need the exemption, and because better information has been obtained for more accurate estimates of MeBr critical needs.

IV. THE CUE PROCESS: ARE U.S. INTERESTS BEING SERVED?

A key measurement to determine if U.S. interests are being served is whether the U.S., through implementation of the Treaty and the exemption process, is achieving an end result that serves the critical needs of growers and other users. In this regard, it is notable that the Parties have agreed to the vast majority of the U.S. Critical Use Nominmation (CUN) requests. The Parties approved over 90 percent of the CUN for 2005, 2006 and 2007 amounting to 37 to 26.4 percent of the U.S. 1991 baseline consumption.

A second important metric in determining whether the CUE process serves U.S. interests is understanding whether our technical work – at the level of the technical review processes internationally – is getting a fair hearing. We recognize that the CUE process, involving literally hundreds of individual crops and users in 17 countries, presents an unusually difficult challenge for the Methyl Bromide Technical Options Committee (MBTOC), which is the expert technical panel that evaluates applications on behalf of the Parties. This body is made up of international experts, including a significant number of U.S. experts. MBTOC is not a decision-making body. It is solely responsible for assessing national CUNs and making technically-based recommendations to the Parties.

In prior years, due to the newness of the process and the formidable challenge posed by the sheer volume of material being reviewed by this small group, the U.S. faced situations in which large portions of the U.S. nomination were listed by MBTOC as 'unable to assess,' leaving the Parties without any guidance from a technical perspective. With strong support from the U.S., the Parties took steps in 2004 to address this challenge by adopting Decision XVI/4 to provide clear guidance to the MBTOC in their review of CUE nominations. The U.S. welcomes these improvements and believes these new guidelines will ensure that the MBTOC reviews fully consider the relevant technical and economic criteria contained in Montreal Protocol decisions and transparently describe the basis for their evaluations.

Finally, we also know that the Montreal Protocol and the CUE process had the effect of increasing choices in the private marketplace. This emulates what we saw in earlier transitions. One reason we have seen the U.S. CUNs decline over time is due to the penetration of MeBr alternatives. There are some new alternatives to MeBr that are efficacious and there is evidence from recent multi-year studies that enhanced application techniques and other factors can make certain chemicals suitable MeBr replacements as well.

V. ALTERNATIVES TO METHYL BROMIDE

The U.S. government commitment to research, approval, and deployment of alternatives remains high. From 1993 through 2004, the USDA Agricultural Research Service has spent approximately $200 million in an aggressive research program to find alternatives to MeBr. Through the Cooperative State Research, Education, and Extension Service (CSREES), USDA has provided an additional $19.7 million since 1993 to state universities for MeBr replacement research and education. These federally supported research activities are in addition to extensive private sector efforts.

Making additional alternatives available to growers goes right to the heart of EPA's responsibility to help identify, register, and implement safe and effective alternatives. Understanding the importance of this in the phase-out of MeBr, EPA has made the registration of alternatives to MeBr its highest registration priority. Furthermore, EPA scientists routinely meet with prospective MeBr alternative applicants, counseling them through the pre-registration process to increase the probability that data are collected and submitted correctly the first time, thus minimizing delays.

Our efforts have paid off in several areas. Since 1997, EPA has registered a number of chemical/use combinations as part of its commitment to expedite the review of MeBr alternatives. While there is no silver bullet among them, they are nonetheless an important part of our overall strategy to replace MeBr. They include:

- 2000: Phosphine to control insects in stored commodities
- 2001: Indian Meal Moth Granulosis Virus to control Indian meal moth in stored grains
- 2001: Terrazole to control pathogens in tobacco float beds

- 2001: Telone applied through drip irrigation (all crops)
- 2002: Halosulfuron-methyl to control weeds in melons and tomatoes
- 2003: Trifloxysulfuron sodium as an herbicide for tomato transplants in Florida and Georgia
- 2004: Fosthiazate as a pre-plant nematocide for tomatoes
- 2004: Sulfuryl fluoride as a post-harvest fumigant for facilities
- 2005: Sulfuryl fluoride expanded label to include stored commodities
- 2005: Muscodor albus as a biofumigant for pathogenic soil fungi, bacteria, and nematodes.

In addition, EPA is currently reviewing several applications for registration as MeBr alternatives. One of these, methyl iodide (iodomethane), is considered by industry and the research community to be a potential broad spectrum replacement for pre-plant uses of MeBr. Other registrations under review include sodium azide for pre-plant applications to ornamentals and turf, and furfural for pre-plant applications in greenhouse situations, ornamentals, and turf. As required by Federal pesticide laws, including the Food Quality Protection Act, EPA is currently conducting tolerance reassessment and reregistration of MeBr to ensure that its registered uses meet today's health and safety standards. To facilitate this review, EPA expects to release the revised risk assessment for MeBr and other soil fumigants in late spring of 2006 for public review and comment. Because soil fumigants are used in similar ways and present potential risks from similar paths of exposure, it makes sense to review the fumigants together rather than on separate time schedules. This process will assure a balanced, comprehensive and transparent evaluation of the risks and benefits of all fumigation options.

Thus, the CUE process is serving U.S. interests by encouraging the wider development and deployment of additional choices – some with limited application, others with potentially wider applicability – for growers to select from in meeting their needs. By allowing the U.S. an important 'safety valve' through which to balance growers' needs with the environmental and public health goals of the Montreal Protocol, the CUE process has also made it possible for the U.S. to maintain our strong commitments under the treaty.

In addition, in keeping with the effort to fully meet our obligations under the treaty, users of MeBr have made and are continuing to make progress in reducing the use of MeBr. At the same time, innovative U.S. technologies and practices allow our growers to maximize the effectiveness of MeBr in controlling pests. The reductions in U.S. consumption over the past few years have been successfully accomplished in part because growers have found they can still control pests effectively by diluting MeBr with other pest-control compounds, like chloropicrin, using barrier films, and reducing their application rates of MeBr.

VI. CONCLUSION

Mr. Chairman, the U.S. positions in recent Meetings of the Parties have demonstrated the Administration's strong continued support for the Montreal Protocol as well as our commitment to phase-out MeBr as technically and economically feasible alternatives become available for U.S. growers and other users of MeBr. The Administration believes that the CUE process is working – that it balances the need to protect public health with the need to ensure the critical needs of American farmers are met.

Altogether, we believe it is vital to work with Congress and the community affected by the MeBr phase out to ensure that our implementation of the Protocol and the CUE process continues to be successful. I thank you for this opportunity to testify before this Subcommittee on behalf of the Department of State, the Department of Agriculture, and the Environmental Protection Agency. My colleagues and I would be pleased to answer any questions you may have.

Mr. ISSA. Thank you, Mr. Wehrum.

We will now hear from Ms. Castellano.

STATEMENT OF MICHELLE M. CASTELLANO

Ms. CASTELLANO. Thank you, Congressman Issa.

As you stated, my family grows cut flowers in the San Diego area of California. I am a third-generation flower grower. We farm approximately 400 acres in that area.

The question of whether the CUE process is working is of great importance to us and all of the agricultural sector. I am here today on behalf of the entire ornamental cut flower industry, and from our point of view, we would have to say that it is not working. We support the Montreal Protocol and we support being part of it, but we do not feel that we are being treated fairly in that process.

We are very clear on the terms of the Protocol and are in compliance, yet we continue to receive arbitrary cuts from our applications for our needed methyl bromide. At the first level, we are concerned when EPA reviews our applications. We feel that they review our applications without a complete understanding of the agricultural industry and the varying practices of agriculture, different sectors and within our different communities. Despite their relentless attempts to understand agricultural practices, pesticide use, varying practices from different regions, we find that agriculture does not fit into EPA's BUNI charts that they use across the sector, and especially cut flowers tends to be more complex than other agricultural practices. We will continue working with EPA in getting a better understanding, but in the meantime, we feel that the cuts that take place in those BUNI charts is an arbitrary cut and not scientifically justified.

We are further concerned that when EPA proposes this reduced application to the international community, MBTOC arbitrarily reduces our amount as well without scientific justification. My written testimony includes an excellent letter from Claudia McMurray noting the U.S. concerns with MBTOC's arbitrary reduction with no scientific reasoning. And it also includes one of MBTOC's reports making assumptions that if alternatives work in one region, they are going to make the assumption that it is going to work in another region and make cuts up to 20 percent. There is no scientific justification for this, and according to the Protocol, that is outside of MBTOC's area. There needs to be scientific justification for cutting our application.

In addition to the arbitrary cuts, we are also concerned that more and more of our allocations are being derived out of stocks—stocks being methyl bromide that was manufactured prior to the 2005 cutoff. Stock supplies that may or may not exist are not part of the Montreal Protocol and are not controlled by the Montreal Protocol and, therefore, should not be part of the allocation. Not only is it not part of the allocation and should not be discussed, it is also taking up much of the U.S.' time at the international meeting. Instead of focusing on the terms of the Protocol, they are spending way too much time negotiating these stock numbers that we do not feel are appropriate.

Most recently, applicants, such as us, are also required to provide a National Management Strategy, and as part of this strategy, we

are supposed to suggest how our critical use exemption amounts will be phased down. That is also not part of the Protocol. The phaseout was for 2005 if critical use exemptions are needed; that is, if no technical or feasible alternative exists based on research, we are allowed to apply for this critical use exemption. Let me reiterate, that is part of the Protocol. The United States did sign onto the Protocol, and this was part of it. We are still at that point. We would be happy to use alternatives if they were out there, but they are not.

If our applications are scientifically justified, which we feel they are—our research that takes place in the United States in the agricultural industry is the most complex research taking place and the most sophisticated research. Therefore, we feel that our applications are completely within the Protocol, and the cuts that are taking place are not justified.

I thank you again, and I am happy to answer any questions.

[The prepared statement of Ms. Castellano follows:]

STATEMENT BEFORE THE

SUBCOMMITTEE ON ENERGY AND RESOURCES

COMMITTEE ON GOVERNMENT REFORM

U.S. HOUSE OF REPRESENTATIVES

HEARING ON

METHYL BROMIDE:

ARE U.S. INTERESTS BEING SERVED BY THE CRITICAL USE EXEMPTION PROCESS?

submitted by

MICHELLE M. CASTELLANO
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on behalf of the

SOCIETY OF AMERICAN FLORISTS
AMERICAN NURSERY & LANDSCAPE ASSOCIATION
CALIFORNIA CUT FLOWER COMMISSION

February 15, 2006

Contact:

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Chairman Issa and Members of the Committee, we thank you for this opportunity to present joint testimony on behalf of the floriculture, nursery, and landscape industry of the U.S. The topic of continued availability of methyl bromide to U.S. nursery and floriculture growers is of huge importance to our industry.

We are complying with the Montreal Protocol. However, our industry is in danger because we are not being treated fairly under the terms of the Treaty. We have demonstrated our compliance, and we ask Congress to act to ensure that U.S. interests are protected under the terms of the Montreal Protocol.

At the outset, I want to thank not only the members of this Committee and its staff, but also those other members who have been particularly supportive throughout this lengthy and frustrating process. Congressman George Radanovich and his staff have worked for legislation that we believe will address the problem. Congressmen Darrell Issa and Mark Foley gave up part of their 2004 Thanksgiving holidays to be with us at the international meeting of the parties in Prague, and not only were there, but were tireless and indomitable in their attempts to understand and address the problems we are facing. Congressman Roy Blunt and Mark Anderson, of his staff, have been unyielding in their determination to help us. We very greatly appreciate all of your support in making an effort to understand and address the problems associated with the implementation of the Montreal Protocol.

The Society of American Florists (SAF) is the national trade association representing the entire floriculture industry, a $19 billion component of the U.S. economy. Membership includes about 10,000 small businesses, including growers, wholesalers, retailers, importers and related organizations, located in communities nationwide and abroad. The industry produces and sells cut flowers and foliage, foliage plants, potted flowering plants, and bedding plants. Our products compete in an international marketplace. U.S. growers, whose ability to compete in that international marketplace is often at stake, are very concerned that their rights under the Montreal Protocol be supported by the U.S. government. Methyl bromide is a critical management tool in many kinds of production, particularly in Florida and California.

The American Nursery & Landscape Association (ANLA) is the national trade association for the nursery and landscape industry -- producers, retailers and landscapers focusing primarily on trees, shrubs and other woody ornamentals, perennial plants, and bedding plants. ANLA represents 2,500 production nurseries, landscape firms, retail garden centers and horticultural distribution centers, and the 16,000 additional family farm and small business members of the state and regional nursery and landscape associations. ANLA's grower members are estimated to produce about 75 percent of the nursery crops moving in domestic commerce in the U.S. that are destined for landscape use. Methyl bromide is a critical pest management tool for production of many types of planting stock, such as the fruit trees and strawberry plants grown for America's orchards and farms.

The California Cut Flower Commission (CCFC) is a non-profit public corporation formed in October 1990 by and for growers, under the laws of the State of California. Its mission is to provide a unified effort by growers to enhance the performance of the California cut flower and greens industry, by providing promotion, marketing, government education, and research on behalf of the industry. It was voted into being by a referendum of cut flower growers and is financially supported by grower assessments on the sales of fresh cut flowers and cut greens.

In crop value, nursery and greenhouse crops have surpassed wheat, cotton, and tobacco and are now the third-largest crop in the U.S. – behind only corn and soybeans. Nursery and greenhouse crop production now ranks among the top five agricultural commodities in 24 states, and among the top 10 in 40 states. Growers produce thousands of varieties of cultivated nursery, bedding, foliage and potted flowering plants in a wide array of different forms and sizes on 1,305,052 acres of open ground and 1,799 million square feet under the protective cover of permanent or temporary greenhouses, across the United States.

I. U.S. ORNAMENTALS GROWERS ARE IN COMPLIANCE WITH THE TERMS OF THE MONTREAL PROTOCOL -- BUT DO NOT RECEIVE THE CRITICAL USE EXEMPTIONS TO WHICH THEY ARE ENTITLED UNDER THE PROTOCOL

The United States is a signatory to the Montreal Protocol. Under its terms, U.S. growers are entitled to a Critical Use Exemption (CUE) if practicable and economical alternatives are not available, efforts have been made to find those alternatives, and a significant market disruption would result from lack of availability of methyl bromide. U.S. growers have complied with the terms of the treaty. We are entitled to our exemption. But we are not receiving the full exemptions to which we are entitled under the treaty.

The U.S. ornamental industry's requests for a Critical Use Exemption are prepared in great detail and with considerable effort and expense. They are exhaustively reviewed by our government, adding even more burden to the process. After all that, we are subjected to non-scientific criticism and cuts at the domestic and international level. The process at the international level appears to be political, not scientific -- and U.S. growers are in danger of irrevocable harm.

U.S. growers are in compliance with the terms of the Montreal Protocol. When we have economic and practical alternatives to methyl bromide, we use them. We have made our best efforts, and invested hundreds of thousands of dollars in research to find workable alternatives.

Today we are faced with an international, political process which is attempting to circumvent the Critical Use Exemption process to *force* U.S. growers to discontinue the use of methyl bromide -- whether they have alternatives or not. It will force U.S. growers out of business, and those who do not go out of business will be non-competitive in the global marketplace. We believe that the agenda at the international level is to work deliberately against U.S. interests.

We respectfully request that the U.S. Congress act, quickly and forcefully, to protect our rights under that treaty.

II. THE BASIC CUE PROCESS

1. U.S. growers prepare a very detailed application for EPA, setting out their efforts to find alternatives, the reasons why alternatives do not work, and the economic reasons why methyl bromide must continue to be used.
2. EPA reviews, and as necessary, supplements this application and ensures that the U.S. applications are complete and accurate. Note here that EPA has usually reduced the amounts we request, and we question those reductions.
3. EPA submits the application in a timely fashion to the Secretariat of the Montreal Protocol.
4. The U.S. application and all other applications are reviewed by MBTOC and TEAP (the "scientific committees" of the Montreal Protocol governing body)..Again, significant reductions are recommended, we believe without scientific justification.
5. The full meeting of the parties to the treaty votes on and approves the allocation, giving great weight to the recommendations of MBTOC/TEAP.

III. THE MONTREAL PROTOCOL CRITICAL USE EXEMPTION (CUE) PROCESS IS SIMPLY NOT WORKING AT THE DOMESTIC OR INTERNATIONAL LEVEL. THE U.S. CONGRESS MUST ACT TO PROTECT U.S. GROWERS.

The U.S. cut flower and foliage industry is in complete compliance with the Montreal Protocol and the terms of its Critical Use Exemption Process. While the Montreal Protocol deals with the phase-out of the production of methyl bromide, the Protocol also clearly provides for a Critical Use Exemption. In short, an application can be made for continued use of methyl bromide if efforts have been made to find alternatives. If feasible and economical alternatives are not available, then commodities can continue using methyl bromide.

Yet this provision is not being followed in the implementation of the Treaty. Despite being in compliance with the Protocol, the U.S. is being forced to take arbitrary cuts with absolutely no scientific reasoning and no justification under the Protocol terms. That is not the Protocol that the U.S. signed, and the U.S. government must not accept it.

We are not suggesting that the U.S. withdraw from the Protocol – just that we ensure that the Protocol's terms are being followed. Only in this way can Congress tell the rest of the world that the U.S. *will* not only comply with the terms of the treaty — but that the U.S, *will not* submit to the political machinations of other members of the international body which are deliberately undermining U.S. interests.

The U.S. government agreed to the terms of the Montreal Protocol. We, the U.S. growers, have followed all of the requirements of the Protocol. **PLEASE MAKE SURE THAT WE ARE PROTECTED UNDER THOSE TERMS**. That is all that we are asking.

A. EPA's Arbitrary Reduction

In the CUE process, applications are submitted to EPA for initial review. Despite EPA's best attempts and relentless efforts to understand agricultural practices and pesticide/fumigation needs -which differ not only from crop to crop, but differ from region to region - the individuals at EPA are acting primarily as accountants in putting together a final U.S. package for submission to the international body. EPA seeks to fit each commodity nicely into a BUNI chartso they can easily come up with a formula determining our industry's methyl bromide needs. Unfortunately, we do not fit into perfect charts and graphs, and assumptions are being made at EPA to squeeze us into charts and determine our agricultural needs.

Please consider the U.S. ornamentals industry. We at Mellano & Company farm over 400 acres (employing over 200 employees) and grow over 50 different crops of flowers and greens, with upwards of 20 different varieties within each of those crops. Unlike other agricultural farms, you have to envision our farm as a patchwork crazy quilt, with each square constantly changing in terms of crops, cultivating times, disease, pests and irrigation needs – and market demands.

We cannot fit our growing practices into one neat formula because we are ever-changing and cannot afford to let our ground sit unused and idle. We must respond quickly to market demands, as well as pest and other growing requirements, and have the adequate tools to prepare our land for these changes. in time to produce a saleable crop.

In the ornamental industry, Mellano & Company is only one grower, in one region. To try and make our entire industry fit into one BUNI chart to determine all of our methyl bromide needs is just not accomplishable.

We will continue to work with EPA to ensure their better understanding of each of our agricultural issues, but in the meantime, our application amounts are reduced by EPA and we cannot afford this unscientifically based cut.

B. MBTOC/TEAP Arbitrary Reduction

MBTOC/TEAP (the "scientific advisory committees" of the Montreal Protocol) are tasked with reviewing the countries' applications to make sure they are based on sound science. After this review, MBTOC/TEAP makes a recommendation to the parties as to what each country's allocation should be. That recommendation is supposed to be based on their scientific reasoning.

Our applications, already reduced by EPA, are presented to MBTOC/TEAP. We are further frustrated when the MBTOC/TEAP recommendations are a further reduction with no scientific justification.

U.S. State Department Deputy Assistant Secretary for the Environment Claudia A. McMurray sent an excellent formal letter to the Ozone Secretariat of the United Nations Environment Program, in which she argued effectively against the cuts that MBTOC/TEAP proposed. She said:

> *"We were surprised to find that the TEAP and its subsidiary body, the Methyl Bromide Technical Options Committee (MBTOC), took what appears to be an arbitrary approach in making recommendations for 2006 CUE requests.... The MBTOC/TEAP has reached very different conclusions from our technical experts regarding the amount of methyl bromide for which no economically or technically feasible alternatives are available for U.S. users. However, it is unclear whether the MBTOC/TEAP recommendations are based primarily on an arbitrary 20% reduction factor or if there has been a more detailed analysis made for the specific crops and regions contained in the U.S. CUE request.... Most importantly, much of our analysis was based on a detailed review of whether alternatives were economically feasible. In a number of cases where an alternative may have been technically feasible, we found that the costs associated with use of that alternative were not viable from an economic standpoint. However, the MBTOC recommendation does not address our economic analysis, nor does it appear to include its own economic analysis. It is therefore unclear whether MBTOC has determined that alternatives are in fact economically feasible since this issue appears not to have been addressed."*

The following quotation from the MBTOC/TEAP report on the CUE nominations is particularly revealing of the unscientific and biased nature of the MBTOC decisions:

> *"MBTOC assumed that an alternative demonstrated in one region of the world would be technically applicable in another unless there were obvious constraints to the contrary e.g., a very different climate or pest complex." [Report of the TEAP, October 2004, page 5]*

This assumption is completely invalid and unjustified. This kind of "assumption" is not based on science. The U.S. has provided detailed scientific information on why certain alternatives available to other countries will not work in the U.S. Not only do climate and pest complexes differ, but the economies differ. An alternative which might be economical in a developing country may not be usable in the U.S., where cost/profit margins are considerably slimmer and labor, environmental compliance, and chemical costs are very high.

It is absolutely essential that MBTOC and TEAP be required to provide scientific justification for their decisions, and detailed rationales of their recommended cuts to the nominating party. Without understanding why MBTOC/TEAP are recommending cuts, it is impossible to answer or defend a nomination, and we are forced to accept what can only be classified as an arbitrary reduction. Our State Department cannot argue effectively on our behalf so long as this charade of scientific review is allowed to continue.

C. The Negotiations at the Meeting of the Parties are Political, Not Science-Based

According to the agenda, the discussion period of the international meetings is directed around the CUE process of the Montreal Protocol. However, the underlying agenda for most parties has nothing to do with the Protocol treaty terms.

Instead, discussion and negotiations tend to revolve around three perceptions: (1) that the US requests are too large; (2) national management strategies and (3) stocks or existing inventories.

1) The perception that the U.S. request is too large and should be reduced, or reduced to "zero-use" over time. Discussion at the international meetings imply that the U.S. applies for too much methyl bromide under its CUE application, and the amount should be reduced and phased out over time.. Under the Montreal Protocol, if no economical and feasible alternatives exist for an industry, despite ongoing research to find an alternative, the industry can utilize the CUE process.

The United States' agricultural community has complied with the CUE requirements, despite the fact that they are cumbersome, time-consuming and costly. We continue to produce research at internally and at top universities for alternatives. We have spent a tremendous amount of time defending and educating our applications to EPA and to MBTOC/TEAP. We have thoroughly complied with the process.

Yet our applications continue, year after year, to be arbitrarily reduced, without any or with very inadequate scientific explanation.

There are forces in the international body who are determined that the CUE process should be a declining process -- in other words, no matter what kinds of industry changes, what kind of pest pressure, what kinds of crop patterns -- we should reduce **the amount of methyl bromide to which we are entitled under the CUE process**, year by year, until all methyl bromide use is eliminated.

MBTOC/TEAP stated in their October 2004 Report that:

> *"... each Party that makes a critical-use nomination after 2005 has to submit a national management strategy for its methyl bromide phase-out ... [including] estimates of annual market penetration of alternatives to bring forward the time when it is estimated that methyl bromide consumption for such uses can be reduced and/or ultimately eliminated....*

Several of the parties vigorously objected to this practice during the meeting, and the Report of the Prague meeting (2004) states:

> *"A number of Parties felt that imposition of a 20 per cent reduction ... could be understood as an attempt by the Methyl Bromide Technical Options Committee to recommend a policy. They strongly expressed the view that the Committee had strayed from its mandate to provide technical assessments and to restrict itself to evaluating nominations according to the criteria laid down in the relevant decisions of the Parties...." [Report of the 16th Meeting, page 14, item 100]*

As noted earlier, it is the clear intent of some to force a year-by-year decline in CUEs approved by the Parties. Such discussions and goals are contrary to the Treaty. The Treaty provides for the Critical Use Exemptions in cases where practicable and economical alternatives do not exist. The Treaty does *not* provide that CUEs should decline year by year.

2) National Management Strategy: Reduction to "Zero-Use"

The international parties now require countries with CUE applications to also submit a National Management Strategy. At the recent meeting of the parties, the U.S. spent a significant amount of time negotiating the details of this plan, rather than defending the allocations on the table.

From the 2004 International Meeting's Report: *"Where there was no change in quantity of methyl bromide used based on historical data and in the temporary absence of such detailed management plans, TEAP and its MBTOC adopted an interim standardized phase-in schedule ... for nominations <u>where MBTOC recognized existing technically feasible alternatives were available</u>...In instances where technically feasible alternatives were available, MBTOC typically suggested a 10-20% reduction factor...." [TEAP Report, October 2004, page 10, emphasis supplied]*

We are concerned that not only is this taking the focus away form the allocations that are currently being cut, but this concept (supported by the E.U. (and particularly by those countries within the E.U. who do not use methyl bromide) is just another way to phase out the CUE allocations despite the fact that no where is that required by the Protocol.

3. Stocks

With each allocation, more and more of the CUE allocations have been directed to come out of existing stocks, rather than from new methyl bromide production. The Montreal Protocol deals with new production of methyl bromide and does not refer to or control stocks of pre-existing material. However other countries and our own domestic environmental groups have placed tremendous pressure on the U.S. State Department to accept that part of our allocation should come from stock. <u>This is not part of the Protocol and should not be negotiated.</u>

IV. EPA'S FINAL RULE NEEDS TO BE MADE TIMELY

At the international level, the parties agree and ratify an amount, based on MBTOC/TEAP's recommendation. Once this is approved by the parties at the international level, EPA must publish its final rule. The approved amount of methyl bromide can now be manufactured and made available for distribution to be made available to us, the end-user.

EPA's final supplemental rule for the 2005 allocation was published on December 23, 2005.

In response to agriculture, industry and congressional pressure, EPA published its 2006 rule on January 31, 2006. This is still too late!!!!! Manufacturers cannot even manufacture the methyl bromide until this rule is published, let alone distribute it to the end-users. As a flower grower, we have just concluded our Valentine's Day crops and need to quickly prepare our land for new crops as well as our upcoming Mother's Day holidays. No 2006 methyl bromide production has begun; therefore it will be some time before it will even be made available to us.

EPA's rule must be more timely. By postponing the allocation rule, it seems another sector of our own government is forcing us to deplete methyl bromide stocks – which is not part of the Protocol. And if stocks no longer existed (as they may not before the end of 2006), EPA's failure to publish the rule in a timely manner would single-handedly put us (and hundreds of thousands agricultural employees) out of business.

V. WHY THE CUE PROCESS IS NOT WORKING

The CUE process is not working. Our government needs to make sure that it does not negotiate outside of the Protocol's parameters.

Perhaps the most troublesome aspect to this story is that while our allocation is being dwindled away, our competitors in lesser developed countries will continue to have methyl bromide available for their use for several years. U.S. growers, in an increasingly international economy, need better and better tools to remain competitive. Instead we are being forced to accept less then we are entitled to.

Research has not found an alternative to methyl bromide despite our best efforts. We are not there yet. Therefore, we take the cumbersome steps to comply with the Montreal Protocol- we continue to support research seeking these alternatives; we fulfill a lengthy and difficult application process, and cooperative to provide any additional information. We have followed the steps as defined by the Montreal Protocol.

We understand that complying with the process is not only burdensome for U.S. industry, but is also a difficult battle for the State Department and EPA. It is expensive, time-consuming, and frustrating. But decision at the international level must be made on the basis of the Protocol, not on other countries' and NGO's predetermined agendas.

VI. CONCLUSION

The CUE process is not working, and U.S. industry is in danger of becoming non-competitive as a result. We are NOT receiving the exemptions we are entitled to under the Montréal Protocol. It is time for this Committee to provide legislative insistence that will support U.S. growers.

The U.S. industry has fulfilled the terms of the Montreal Protocol. It is in compliance. Year after year, we have prepared and submitted CUE requests, based on the amounts we need. However, both EPA and MBTOC/TEAP have each year made significant, and, we believe, scientifically unjustified cuts to our requests. The result is that each year since this process started, our allocations have decreased significantly from the allocation of the previous year, and, of course, from our requested amount. Yet our needs have not decreased. And because we are still in the early stages of CUE allocations, the ramifications of these cuts still may not have been fully realized.

The discussion and stated agenda at the international meeting is the CUE process. However, the underlying agenda for many of the participants is completely different – and has nothing to do with the Montreal Protocol Treaty. The State Department must defend us under the terms of the protocol or walk away.

Getting U.S. CUE allocations to "zero-use" over time is not required by the Montreal Protocol. The treaty clearly provides that until economic and practical alternatives are found, so long as continued research is being done, the industry should have CUEs. The Treaty does not envision that at some arbitrary date in the future we would be forced to do without methyl bromide if no other alternatives were available.

The United States government must support the U.S. agricultural economy in ensuring that methyl bromide remains available to growers, until suitable alternatives are found and can be implemented. We cannot simply bow to decisions which appear to be predetermined and which will put our agricultural sector at a very significant competitive disadvantage in the international marketplace. The phaseout of methyl bromide is a critical issue for U.S. agriculture, and we respectfully request this Committee for support and assistance in reaching a reasonable solution to what is rapidly becoming a crisis for many producers, and the workers they employ across the United States.

Mr. ISSA. Thank you.
Mr. Bair.

STATEMENT OF JAMES A. BAIR

Mr. BAIR. Thank you, Mr. Chairman and members of the subcommittee. I am Jim Bair, vice president of the North American Millers' Association, and I am also here as vice chairman of the Crop Protection Coalition. NAMA has 48 member companies that operate 170 grain mills in 38 States and have a collective daily production of more than 160 million pounds, and the chairman and ranking member may find it interesting that California is leading in that category. In fact, Los Angeles is the milling capital of the United States. There are six mills in Los Angeles that produce 8 million pounds of flour every day.

Mills use methyl bromide for just one reason, and that is to keep insects out of food. We think that clean and wholesome food is something that consumers have come to expect. We know that the Food and Drug Administration demands it, and most people will remember seeing their mother or perhaps their grandmother baking and sifting flour, and the reason you sifted flour was to get the bugs out of the flour. And there is a reason that you can hardly find a flour sifter anymore. It is because there are not bugs in the flour. Methyl bromide is one of the tools that we use to make sure that continues to be the case.

We are getting better every day about minimizing our use of pesticides, and even in advance of the Montreal Protocol cuts, we had already voluntarily cut our methyl bromide usage by about 60 percent.

What is all the fuss about? This controversy about methyl bromide, we are spending tremendous resources on it. In my opinion, the controversy is not about a problem of significant environmental consequence. If you go to the U.S. EPA Web site, you can find a lot of data. For example, this says that the amount approved for 2006 is about 0.3 percent of the ozone-depleting potential from all sources when the Montreal Protocol was first negotiated. So we are talking about a tiny slice of the ozone-depleting potential that remains. And like most things, those tiny incremental gains to be made are going to be the most difficult and extraordinarily expensive to achieve.

Montreal Protocol meetings, as Ms. Castellano referenced, these meetings do not represent the open policymaking that you would recognize from the U.S. Congress, for example. The 2003 meeting was in Nairobi, which is a city so dangerous that the U.S. Embassy had evacuated its Embassy—excuse me, the State Department had evacuated its Embassy. The 2004 negotiations took place on Thanksgiving Day. The 2005 negotiations were in Dakar, Senegal, which is not exactly an easy place to get to. And the 2006 working group meetings will be on our 4th of July Independence Day. So we think that if the United States has to defend the largest critical use exemption program, it is not unreasonable to think that it could be done at a date and a location that would be convenient for the CUE holders to be able to get there and defend and answer questions. And, frankly, we ought to be able to do that since the

U.S. funds 25 percent of all the Montreal Protocol activities each year.

Those meetings, when we get there, I know Ms. Castellano and I have both been kicked out of meetings there. The substantive negotiations take place behind closed doors. And I think American agriculture is justifiably skeptical about receiving fair treatment through such a process.

Let me briefly hit how the CUE process works. As has been said, we submit our application every summer. That goes to the U.S. EPA. They analyze it. They make a cut—so far they have already made a cut. They roll all those CUEs into one package, which goes to the United Nations Environmental Program parties. They make another cut. Then it goes back to the U.S. EPA, and before they make their allocation, they can make another cut, as they did just in January of this year where they cut us by another 15 percent. It is important to note, I think, that in each of those cuts, we have no right of appeal.

We object to the way rules are changed in the middle of the game. Congress ratified the Montreal Protocol treaty with an understanding about what the details of that agreement were, and yet every year the treaty—there are agreements made that we think change the original intent of the treaty.

Mr. Chairman, you asked for recommendations in testimony about how we could improve the CUE process, and I will be happy to do that briefly for you.

We think that when cuts are made, we should have the right of appeal, and that they should not be made without some basis in scientific fact.

We think that the U.S. EPA should be required to publish any changes in the rules or the allocations by December of the preceding year. For example, this year they did not publish the 2006 allocation until almost February 1st. I am aware of growers and food processors who had the need to fumigate in January and did not because they were not sure if it would be legal to do so.

So I would be happy to—I see my time has expired. I would be happy to go through more recommendations in the question-and-answer period, but I want to thank you for your——

Mr. ISSA. How many more do you have?

Mr. BAIR. Just a couple. It would just take me 30 seconds.

Mr. ISSA. Without objection, go ahead.

Mr. BAIR. We think that the Congress should shine more light on the international process. Again, the closed meetings are a problem. Hold the meetings in a place that is safe and reasonably convenient for us to attend.

Research—we think Congress should increase funding for research to develop effective and economic alternatives. You have appropriated funds for, as you said, nearly $200 million worth of research, with very little to show for it so far.

Those are my recommendations, and I thank you for the extra time.

[The prepared statement of Mr. Bair follows:]

Testimony of
James A. Bair
North American Millers' Association

Before the
House Government Reform Committee
Subcommittee on Energy & Resources

On the question
Methyl Bromide: Are U.S. Interests Being Served by the Critical Use Exemption Process?

February 15, 2006

Thank you Mr. Chairman and members of the Subcommittee. I am Jim Bair, vice president of the North American Millers' Association. NAMA is the trade association representing 48 companies that operate 170 wheat, oat and corn mills in 38 states. Their collective production capacity exceeds 160 million pounds of product each day, more than 95 percent of the total industry production.

I am also vice chairman of the Crop Protection Coalition.

Background

In Congressional hearings and briefings over the years, grain milling executives have discussed with you how methyl bromide is used to meet government regulations, and consumers' expectations, for clean and wholesome food.

They have testified that methyl bromide is easily the most technically and economically effective tool available to protect grain processing facilities and the food produced in them against insect pests.

They have described how, even in advance of the Montreal Protocol phase-out, the industry cut its usage of methyl bromide by more than 60 percent over the last decade.

Why all the fuss?

Mr. Chairman and members of the subcommittee, I'd like to start by stating what the controversy over methyl bromide is about, and what it is not about. In my opinion, it is not about a problem of significant environmental consequence. According to the EPA website:

- "Anthropogenic (man-made) methyl bromide has contributed a total of about 4% to ozone depletion over the past 20 years. Of this, about 2.5% can be attributed to agricultural fumigation activities."

- "The MBTOC (United Nations Methyl Bromide Technical Options Committee) recommendation to approve 35 percent of the US 1991 baseline for a critical use exemption represents about 0.4 percent of the ozone depleting potential from all ozone depleting substances in all countries when the Montreal Protocol was first negotiated in 1987."

- "Further, the 35 percent figure represents only 1.5 percent of ozone depleting potential caused by all ozone depleting substances in 1989 in the US."

In short, the world is close to zero in its emissions of man-made methyl bromide; so close that any additional incremental gains will be extraordinarily difficult, and expensive, to achieve.

Accelerated Phase-out Schedule for Class I Substances

	CFCs	Halons	Carbon Tetrachloride	Methyl Chloroform	HBFCs	Methyl Bromide
1994	25%	0	50%	50%	100%	100%
1995	25%	0	15%	30%	100%	100%
1996	0	0	0	0	0	100%
1997	0	0	0	0	0	100%
1998	0	0	0	0	0	100%
1999	0	0	0	0	0	75%
2000	0	0	0	0	0	75%
2001	0	0	0	0	0	50%
2002	0	0	0	0	0	50%
2003	0	0	0	0	0	30%
2004	0	0	0	0	0	30%
2005	0	0	0	0	0	0

Source: US EPA

What it is, is an agenda-driven and highly politicized process whereby the fate of our Nation's interests with respect to this issue will be determined by individuals from foreign countries unaccountable to U.S. taxpayers.

Montreal Protocol meetings

Mr. Chairman, the parties to the Montreal Protocol process possess an unhealthy passion for secrecy and undemocratic decision-making. That is irrational, unfair to US farmers and food processors and does not resemble good policy-making as we know it here in the U.S. It begins with the selection of the meeting locations where the Montreal Protocol negotiations will occur.

For instance, the annual meeting of the parties in 2003 was held in Nairobi, Kenya – according to the U.S. State Department one of the most dangerous cities in the world. A city so dangerous that the U.S. embassy evacuated its staff due to terrorist activities.

The 2004 meeting was scheduled for Thanksgiving week and the critical day of negotiations was set for Thanksgiving Day. The 2006 working group discussions have been scheduled over our Independence Day.

Mr. Chairman and members of the subcommittee, much has been made of the fact that the US has the largest critical use program. Therefore it only makes sense for the meetings to be scheduled at a location and on a date that is reasonably convenient for representatives of CUE holders to participate. The US government should not agree to meetings that force its citizens to choose between personal safety considerations and representing their business interests; nor should Americans have to pick between spending the most American of holidays with family or representing their business interests.

As if that were not enough, the U.S. is the largest financial supporter of the Montreal Protocol activities. For 2003-05, the so-called Multilateral Fund of the Protocol was funded at $573 million. It is an outrage that U.S. taxpayers provided about 25 percent of that money to fund activities that threaten our economic wellbeing.

Further, the substantive negotiations take place behind closed doors. I personally have attempted to sit in on such sessions as a mere

observer, only to be kicked out of the room.

American agriculture is justifiably skeptical about receiving fair treatment from agricultural competitors of the US who are not likely to give up this competitive advantage that has been handed to them.

The CUE process

A brief explanation of how the CUE process works may be useful.

1. Each summer methyl bromide user groups submit detailed requests to the EPA. These requests are two and a half years in advance of the calendar year for which the request is made.

2. Next, the US government analyzes those grower and industry CUE requests, and they are rolled into one package that is called the US Critical Use Nomination, or CUN. The US government makes cuts in the requested amount at this time. The US government sends this CUN package to the Parties to the Montreal Protocol.

3. The Parties, based on recommendations from the Technical and Economic Assessment Panel and the Methyl Bromide Technical Options Committee, approve an amount for each sector that may include an additional cut.

4. The US EPA then issues a final rule stating the actual amount of the fumigant allowed for each industry sector, which may include a third cut.

It is important to note that to each of the cuts described we have no right of appeal.

The food processing users of the compound have voluntarily cut their request from roughly 612,000 kg in 2005 down to 501,000 kg in 2008, a reduction of 18%. But the US government has further cut that down to 363,000 kg for 2008 for a total cut of 41%.

Methyl Bromide Critical Use Exemption
Mills & Food Processing Uses

	2005	2006	2007	2008
	(kilograms)			
Industry Request	612,576	603,505	586,722	501,560
US Nomination	536,328	461,768	401,889	363,952
Approved by Parties	483,000	461,758	401,889	TBD

After the Parties approve an amount, the US EPA, in implementing the CUE may make yet another cut, as they did to us for 2006 when the final allocation was published with another cut of 15%.

The arbitrary cuts by the US EPA and the additional cuts by the Parties to the Protocol penalize this industry for honest participation in the process. Some might wonder, if arbitrary cuts are going to be made, why not 'pad' our CUE request so that we end up getting an amount closer to what we truly need. We have not done that.

Further, when my industry attempts to experiment with alternatives those tests are reflected in our final allocation. That is, such an experiment may not have been successful other than adding to the body of knowledge about that particular alternative. But the US EPA counts that as an event that proves the effectiveness of that alternative. Again, what incentive do we have to experiment if our tests are used against us in the review of our CUE?

Following is a list of the members of the Methyl Bromide Technical Options Committee who review and make recommendations about the US nomination. It includes people from countries:

- who are direct competitors of US food and agriculture and are therefore unlikely to willingly surrender the competitive advantage that has been handed to them,
- that have no significant agriculture or food processing industries and therefore have never used much methyl bromide,
- with significant structural differences in their economies that

provide competitive advantages over US processors, and
•that possess an antagonistic and, we believe, pervasive anti-United States attitude.

Methyl Bromide Technical Options Committee
Co-chairs
Jonathan Banks, Consultant, Australia
Nahum Marban Mendoza, Autonomic University of Chapingo, Mexico
Members
Alessandrio Amadio, UNIDO, Italy
Marten Barel, Consultant, Netherlands
Chris Bell, Central Science Laboratory, UK
Antonio Bello, Centro de Ciencias Medioambientales, Spain
Mohamed Besri, Institut Agronomique et Vétérinaire Hassan II, Morocco

Cao Aocheng, Chinese Academy of Agricultural Sciences, China
Fabio Chevarri, IRET-Universidad Nacional, Costa Rica
Ricardo Deang, Consultant, Philippines
Patrick Ducom, Ministère de l'Agriculture, France
Hodayah Finman , US EPA, US

Volkmar Hasse, GTZ, Germany
Saad Hafez, University of Idaho, US
Rick Keigwin, US Environmental Protection Agency, US
George Lazarovits, Agriculture & Agr-food Canada, Canada
Michelle Marcotte, Marcotte Consulting Inc., Canada

Cecilia Mercado, UNEP DTIE, France
Melanie Miller, Consultant, Belgium
Andrea Minuto, Agroinnova Universita Torino, Italy
Mitsusuda Mizubuchi, MAFF, Japan

Mokhtarud-Din Bin Husain, Department of Agriculture, Malaysia

Kazufumi Nishi, Nat Institute of Vegetables and Tea Science, Japan
David Okioga, Ministry of Environment and Natural Resources, Kenya
Marta Pizano de Marquez, Hortitecnia Ltda, Colombia
Ian Porter, Institute for Horticultural Development, Australia
Christoph Reichmuth, BBAGermany, Germany

John Sansone, SCC Products US
Jim Schaub, US Department of Agriculture, US
Sally Schneider, US Department of Agriculture, US
Don Smith, Industrial Research Limited, New Zealand
JL Staphorst, Plant Protection Research Institute, South Africa

Akio Tateya, Japan Fumigation Technology Association, Japan
Robert Taylor, Natural Resources Institute, UK
Alejandro Valerio, Department of Agriculture, Argentina
Ken Vick, United States Department of Agriculture, US
Nick Vink, University of Stellenbosch, South Africa
Chris Watson, IGROX Ltd, UK
Jim Wells, Novigen Sciences, Inc., International, US

Changing rules in the middle of the game
It is our view that rule changes implemented since Congress ratified the treaty have drastically changed the intent and operation of the treaty.

Congress ratified the Montreal Protocol treaty with an understanding about the details of the agreement. Yet, year after year, Montreal Protocol committees have acted to change the rules, significantly altering the original intent of the treaty. When the United States Congress ratified the Montreal Protocol Treaty, it was with the understanding that there would be a stepped down phase-out.

The treaty architects foresaw that at the end of that phase-out period there would be industries for which technically and economically feasible alternatives would not be available. Those authors included language in the treaty that stated that for those industries, a critical use exemption would be available.

Despite what some Protocol parties and activists now claim, the treaty did not say the CUE's were to merely provide an additional glide path beyond the phase-out with the ultimate resolution being a complete elimination. That is not what the US negotiators agreed to nor is it what the U.S. Congress ratified.

Recommendations
Mr. Chairman, in your invitation to me to testify today you asked for advice on how the CUE process could be improved, and I am happy to do so.

1. The US government should trust CUE petitioners have provided honest, accurate data that support their request. Don't cut just for the sake of making a cut for political expediency. Then, when cuts are made, give stakeholders the opportunity to appeal.

2. Require that the US EPA publish the final CUE amounts for a year by the previous December 1. The 2006 CUE document was not published until January 30, 2006, even though the amounts were authorized by the Parties on July 1, 2005. Surely five months is sufficient time to publish such a document. The result of this delay was that users who had immediate need to use the compound were put in the position of not knowing if such use would eventually be shown to be legal according to the EPA. This

is unacceptable.

3. Shine more light on the international approval process. The US should not support or participate in meetings that cannot be conducted in public when vital US economic interests are at stake. The Parties' penchant for secrecy and undemocratic decision-making is unfair to U.S. farmers and food processors, and does not resemble any notion of honest policy making as we know it in this country.

4. Oppose attempts to change the rules in the middle of the game. Congress ratified the Montreal Protocol treaty with an understanding about the details of the agreement and all Parties should adhere to those details.

5. Insist that meetings be held in locations that are safe and reasonably convenient for US interests to attend, and are held on days that are not major US holidays. This should be easily achievable as the US provides one-fourth of the funds that pay for the meetings.

6. As the basis for reviewing and granting CUEs is based on the availability of alternatives, funding for research to develop effective and economical alternatives must be increased and the pace of research accelerated. Congress has appropriated more than $140 million over the last few years to investigate alternatives, with very little to show for it.

7. Declare victory over ozone-depleting substances and stop this irrational pursuit of an unwarranted total elimination. The miniscule gains to be made will require the spending of disproportionate quantities of resources that could be better spent on other environmental challenges.

There are only two ways the current situation can be resolved – one pleasant and one ugly.

In the ugly scenario, proponents of total elimination will continue to push for cut after cut until US food and agriculture says "Enough!" We will insist the US oppose any further reductions. If that happens and the US government walks away from the treaty, it will be a contentious and bitter end to a process on which massive resources were spent.

The other possible scenario is for all the Parties to agree victory has been achieved - methyl bromide usage is the lowest it can practically and economically be. There can be lots of pats on the backs all around, and we all get on with issues that truly matter.

That concludes my testimony, Mr. Chairman. I would be happy to answer any questions you or other committee members may have.

Mr. ISSA. Thank you.
Mr. Doniger.

STATEMENT OF DAVID DONIGER

Mr. DONIGER. Thank you very much, Chairman Issa, Congresswoman Watson. Thank you for the opportunity to be here on behalf of NRDC, which for 30 years the Natural Resources Defense Council has been the principal environmental organization working on protecting the ozone layer.

The global treaty, the Montreal Protocol, is a global success story, and it has been backed by four Presidents of both parties. It has accomplished a great deal already. It has saved millions of Americans and even more people around the world from death by skin cancer and even more people from illnesses such as non-fatal skin cancer and cataracts. Now is not the time to tamper with the success of this agreement.

As the Congresswoman mentioned, methyl bromide is the most powerful ozone-depleting chemical that is still in wide use, and Nobel Prize-winning scientist Mario Molina, whose comments I cite in my testimony, has said that the ozone layer simply cannot fully recover without the phaseout of all the ozone-depleting chemicals, including methyl bromide.

Now, you have heard claims that the process is broken and that there is a shortage of methyl bromide. In my view, there is a glut of methyl bromide available today. More than twice the amount EPA says is needed is available out there, and I will go through why that is so.

But more to the point, or to start at the beginning, the amount of methyl bromide that is said to be needed has been greatly exaggerated. How do we know this? The total amount that was used in 2003 by everyone, by all the users, not just the critical users, was nearly 25 percent less than the amount EPA said the subgroup of critical users needed in 2005. The same thing has happened again this year.

Let me say a word more about the health effects of these exemptions. Dr. Sasha Madronich, who is an expert who helped develop the EPA risk assessment model, working with that model has calculated that the exemptions that were issued in 2005 will lead to more than 10 skin cancer deaths in the United States, more than 2,000 other skin cancer cases, and more than 700 cataract cases. The exemptions for 2006 are roughly the same size, so it is appropriate to double those numbers, and the toll will continue to increase for each year that these exemptions go on.

Now, I am not saying we can get to zero right away. I am not saying we don't need exemptions. NRDC understands and accepts that the exemption process is a part of the treaty. But it is being abused, and it is the abuse that we need to stop and get the exemptions down to size and get toward zero as quickly as we can.

Let me call your attention to figure 2 in my testimony. It is on page 6. I had intended to project some slides. I got here late, and so it is my fault. I appreciate the staff's cooperation in advance to prepare for a projector, and we just did not get time—I did not get here in time to set that up.

But figure 2 shows in the top bar the amount of methyl bromide in pounds, 17 million pounds, that was used by everybody, according to EPA data, in 2003. The critical use allowances for a smaller group of farmers and millers and others were set, in 2005, at 21.1 million pounds, and for 2006, at 18 million pounds. Well, we do not understand how the part can be larger than the whole and why the usage should be that high.

There are a number of reasons why the usage was exaggerated: the use of very old data that was out of date; the use of unreasonable assumptions that the pests will hit everybody everywhere at once; the assumption that everybody needs their own reserve because methyl bromide cannot be moved around in the marketplace. These are all unrealistic and wrong assumptions.

There is a strong injunction from the parties that the United States agreed to to take advantage of tarping with impermeable materials to keep the methyl bromide from leaking from the soil as fast as it otherwise does and thereby reduce the amount needed to accomplish the mission of killing the bugs and to reduce the leakage. There is no requirement for tarping or reduction on account of tarping in these exemptions this year.

If I may be indulged for a couple more minutes?

Mr. ISSA. Go ahead.

Mr. DONIGER. Thank you. The sulfuryl fluoride——

Mr. ISSA. We are going to have a long Q&A.

Mr. DONIGER. I appreciate that. I understand. This is a new chemical. I will save my story about sulfuryl fluoride for the question-and-answer period, if I may, but let me call your attention very briefly to Figure 3, which is about stockpiles.

Now, the treaty, the agreements that our country has made are very clear that there is not supposed to be new production unless there are no stocks, unless the stocks are insufficient to meet the need. We know from the partial data that EPA has given the Congress that the stocks at the beginning of 2004 were larger than the critical use need. When you add to that the new production that was authorized, you end up with an amount which is double the asserted need, and the same is true for 2006. So we have a glut of methyl bromide around. We do not have a shortage.

I will conclude my remarks with that. Thank you.

[The prepared statement of Mr. Doniger follows:]

NATURAL RESOURCES DEFENSE COUNCIL

Testimony of David Doniger
Climate Center Policy Director
Natural Resources Defense Council

Hearing on "Methyl Bromide:
Are U.S. Interests Being Served by the Critical Use Exemption Process?"

Subcommittee on Energy and Resources
Committee on Government Reform
U.S. House of Representatives

February 15, 2006

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Summary

- The Montreal Protocol is a global success story. The Protocol has enjoyed bipartisan backing of four presidents, beginning with Ronald Reagan. It is saving literally millions of Americans, and tens of millions of people around the world, from death and disease. The ozone layer has begun to heal, but it will still take at least 50 more years to fully recover – assuming we stay the course and complete the phase-out of all potent ozone-destroyers, including methyl bromide. Now is not the time to tamper with the world's most effective environmental treaty.

- Methyl bromide is the most dangerous ozone-destroying chemical still in widespread use. Methyl bromide has also been linked to increased rates of prostate cancer in pesticide applicators and other agricultural workers.

- The methyl bromide exemptions allowed in 2005 and 2006 will cause more than 20 deaths from skin cancer, more than 4,000 other skin cancers cases, and more than 1,400 cataract cases, in the U.S. alone. The global health toll will be much larger.

- "Critical use" needs have been dramatically exaggerated. U.S. government data show that the amount of methyl bromide actually used for all fumigation purposes in 2003 was nearly *25 percent less* than the amount claimed to be critical in 2005. A credible exemption process would not have allowed this exaggeration.

- Far from encouraging the development and use of methyl bromide alternatives, the critical use exemption process has become a major obstacle to deploying alternatives.

- The reality is that there is a glut, not a shortage, of methyl bromide available for sale. In 2005, the existing stockpile plus new production allowed by EPA was at least *double* the total amount needed for critical uses. The same is true for 2006.

- The most recent available data show that just five U.S. producers and distributors held a huge methyl bromide stockpiles equaling *at least 22 million pounds*. At least *24* other companies also held methyl bromide stockpiles, meaning that total stockpiles may be even larger. Because of the stockpile, *no* new production was needed last year, and *none* is needed this year.

- Our country needs to comply with existing law and treaty obligations, and with the international agreements made twice last year by the administration. To do otherwise would threaten the repair of the ozone layer, imperil the health of millions of Americans, and stick a finger in the eye of yet another international treaty.

Mr. Chairman, thank you for the opportunity to testify today on critical use exemptions from the phase-out of methyl bromide, on behalf of the Natural Resources Defense Council (NRDC) and its 1.2 million members and on-line activists. For nearly 30 years, NRDC has been the principal voice for protecting the earth's fragile ozone layer.

You will hear claims today that the process under the Montreal Protocol and the Clean Air Act is broken and that farmers and others face a shortage of a chemical for which they have no alternatives. I will present evidence that in reality there is a *glut* of methyl bromide available today: Supplies available last year were *more than double* the amount that the Environmental Protection Agency (EPA) claims was needed by critical users. The same will be true for 2006.

Furthermore, EPA has dramatically exaggerated the amount of methyl bromide needed both last year and this. The amount used by *all* users in 2003 was nearly 25 percent less than amount EPA claimed was needed by critical users last year. Critical use needs have been exaggerated again this year.

And far from encouraging the adoption of methyl bromide alternatives, the exemption process has turned into a major impediment to alternatives. New chemicals are available to substitute for methyl bromide in important segments of the current market, such as mills and other structures. Instead of accelerating the methyl bromide phase-out for these uses, the EPA rules actually will *prolong* methyl bromide use.

I want to be clear that NRDC is *not* trying to stop use of methyl bromide where farmers or others really have legitimate critical use needs and lack adequate alternatives. Under the Montreal Protocol and the Clean Air Act, the United States committed to phase

out methyl bromide over a 12-year period ending on December 31, 2004. That agreement provides for limited critical use exemptions after that date. We understand and accept that *some* methyl bromide exemptions will be made for some period of time.

What we cannot accept, however, is EPA's continuing failure to comply with the Clean Air Act and the Montreal Protocol. That is why NRDC has gone to court to stop the abuse of the critical use exemption process – abuse that is maintaining far more methyl bromide production and use than is really needed and worsening the ozone depletion responsible for so many deaths and illnesses each year. The U.S. Court of Appeals for the District of Columbia Circuit is expected to rule on the legality of EPA's 2005 exemption regulations very shortly.

What's at stake. There are few more heartening success stories than the global effort to phase out the ozone-damaging chemicals. Every American, and every citizen on this Earth, relies on the ozone layer to block dangerous ultraviolet radiation that causes skin cancer, cataracts, immune disorders and other diseases. The Montreal Protocol – which has enjoyed bipartisan support from four presidents, beginning with Ronald Reagan – is saving literally millions of American lives. In the United States alone, the phase-out of ozone-depleting chemicals is projected to prevent an estimated 6.3 million skin cancer deaths, 299 million other skin cancer cases, and 27.5 million cataract cases.[1] The number of lives saved and illnesses avoided on a world-wide basis is much larger.

But the recovery of the ozone layer is not assured. The Antarctic ozone hole is not expected to close, and the ozone layer over the U.S. is not expected to heal fully, before the middle of this century, and then only if the phase-out of ozone-depleting

[1] EPA Report to Congress, The Benefits and Costs of the Clean Air Act: 1990 to 2010, 64 Table 5-5 (1999) (EPA-410-R-99-001), *available at* http://www.epa.gov/air/sect812/1990-2010/chap1130.pdf.

chemicals, including methyl bromide, stays on schedule.[2] Methyl bromide is the most powerful ozone-depleter still in widespread use. Now is not the time to tamper with the Montreal Protocol or the Clean Air Act.

It is hard to come up with an environmental hazard that affects more Americans and that the American public better understands. Millions of Americans – including farmers – must work everyday in the sun. Millions more – from school children to seniors – spend hours of their days out of doors. Millions of concerned parents check the daily UV Index and cover their kids with sunscreen before letting them go out in the sun.

Scientific experts warn us that excess methyl bromide exemptions will have real-world public health consequences. Dr. Mario Molina, the Nobel prize-winning atmospheric scientist who discovered the depletion of the ozone layer, has warned that methyl bromide exemptions will increase damage to the ozone layer and to public health, and may keep the ozone layer from ever fully recovering.[3] Using the government's own risk assessment methodology (which he helped develop), Dr. Sasha Madronich, a highly-qualified expert on the health risks of ozone depletion, has calculated that in the United States alone "it is reasonable to expect more than 10 deaths, more than 2,000 non-fatal skin cancer cases, and more than 700 cataract cases to result from the 16.8 million pounds of new production and consumption [of methyl bromide] allowed by the 2005 exemption rule."[4] The 2006 exemption rule allows another 18 million pounds of methyl bromide use this year and will nearly double that toll of death and illness. And these

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[2] *See* World Meteorological Organization, Scientific Assessment of Ozone Depletion: 2002, xxv ("Failure to comply with the Montreal Protocol would delay or could even prevent recovery of the ozone layer. . . . The total atmospheric abundance of ozone-depleting gases will decline to pre-Antarctic-ozone-hole amounts only with adherence to the Montreal Protocol's full provisions on production of ozone-depleting substances."), *available at* http://www.unep.org/ozone/pdfs/Scientific_assess_depletion/05-ExecutiveSummary.pdf.

[3] *See* Affidavit of Dr. Mario Molina (submitted for the record).

[4] *See* Affidavit of Dr. Sasha Madronich (submitted for the record).

numbers account for only the health toll in the United States. U.S. use of methyl bromide will cause even more deaths and illnesses around the world. (See figure 1.)

Health Toll from 2005-2005 Exemptions

In U.S. alone:

- More than 20 skin cancer deaths
- More than 4,000 other skin cancers
- More than 1,400 cataract cases

Many more cases around the world

Figure 1

Methyl bromide is also a direct threat to the health of people who work with it. The National Cancer Institute has linked methyl bromide to increased prostate cancer risks in a study of 55,000 pesticide applicators, including farmers, nursery workers, and workers in warehouses and grain mills.[5]

Continuing to phase out methyl bromide, while recognizing the legitimate needs of farmers and other users who really have no alternatives, is the single most important thing we can do to assure repair of the ozone layer and to protect those directly exposed.

Excess exemptions for 2005 and 2006. Under the Montreal Protocol and the Clean Air Act, methyl bromide production and import was to end on December 31, 2004, except for limited exemptions for critical uses. The United States has agreed *five times* – once in 1997 and four times in 2004 and 2005 – to the ground rules under the Montreal Protocol for critical use exemptions. Exemptions are allowed under the Protocol and

[5] Michael C.R. Alavanja et al., Use of Agricultural Pesticides and Prostate Cancer Risk in the Agricultural Health Study Cohort, 157 AM. J. EPIDEMIOLOGY 800 (2003), *available at* http://www.aghealth.org/pdfs/AJE157.800.pdf.

section 604(d)(6) of the Clean Air Act only if consistent with those ground rules. In a nutshell:

- There must be a significant market disruption,
- There must be no technically and economically feasible alternatives, and
- Every feasible means must be adopted to minimize use and emissions.
- Further, new production and import of methyl bromide is permitted *only* if existing stockpiles of the chemical are insufficient to meet genuine critical use needs.

None of these requirements has been met in either 2005 or 2006.

Exaggerating how much methyl bromide is really needed. Let's start with the faults in EPA's assessment of critical use needs in 2005 and 2006.[6] The logical place to start is to ask how much methyl bromide really was used *before* the 2004 phase-out date? For 2003, government data show that *all* farmers, millers, and others used a total of 17 million pounds of methyl bromide.[7] (See the top bar in figure 2, next page.) That should be an upper limit on what *critical* users would need in later years, for two reasons. First, since the critical users are only a *subset* of all users, it stands to reason that their needs would be less than the past usage of all users. Second, since alternatives are becoming steadily more available, critical use needs should decline further from this level over time.

For 2005, however, EPA determined that critical users somehow needed *21.1* million pounds – nearly 25 percent more than *all* users needed in 2003. For 2006, EPA's

[6] All the usage data in this paragraph cover methyl bromide usage for fumigation purposes in fields and buildings, excluding quarantine and pre-shipment usage, which is subject to a separate exemption.
[7] Government data obtained under the Freedom of Information Act show that total U.S. consumption (a term of art under the treaty and domestic law meaning "production plus imports minus exports") in 2003 was only about 14.3 million pounds – only about 25 percent of the 1991 baseline amount – even though consumption of 30 percent of baseline was allowed in 2003. The data also show that another five or six percent was drawn down from the stockpiles, bringing total 2003 use by *all* users to about 17 million pounds.

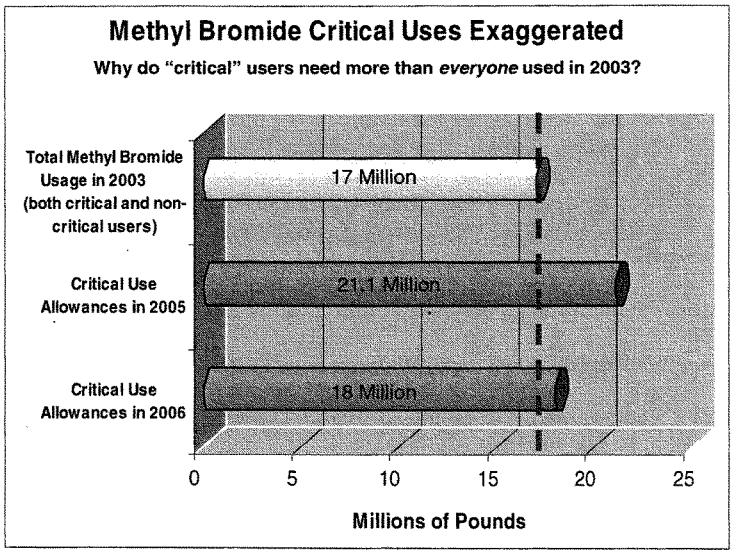

Figure 2

critical use assessment is only a shade smaller – some 18 million pounds – still more than total use in 2003. (These amounts are shown in the second and third bars in figure 2.)

How did EPA produce assessments of 2005 and 2006 critical use needs that so sharply exceed the actual usage of methyl bromide in 2003? There are at least two reasons: First, the data employed to project critical use needs in 2005 and 2006 dated from *2002 or earlier*. This out-of-date data simply did not reflect the progress made in reducing use by 2003, let alone by 2005 and 2006. Second, EPA's assessment process employs patently unreasonable adverse assumptions, such as assuming that worst-case pest conditions hit *every crop at once*. EPA also assumed that extra methyl bromide

reserves are required because the marketplace will not efficiently move existing supplies of the chemical to where they are needed. Neither assumption corresponds to reality. The pests don't attack everywhere at once, and distributors are routinely able to make methyl bromide available when and where it is needed. No farm chemical is inventoried and distributed in the unrealistic way EPA assumed.

There are two other factors EPA failed to consider in deciding on 2006 critical needs. First, EPA disregarded its duty to require use of all feasible means to reduce usage and minimize emissions. One area of great progress in recent years is the use of special tarping materials that hold methyl bromide in the soil longer, thereby sharply cutting the amount of methyl bromide needed to fumigate a field. Since less is used, less ultimately escapes into the air. Tarping with these low-permeability materials should have led to a sharp reduction how much methyl bromide is needed in 2006. But EPA made *no* reductions in the critical use amount on account of these techniques.

Second, EPA failed to take into account the full potential of a newly registered alternative, sulfuryl fluoride, which (together with other substitutes) could rapidly replace methyl bromide use in structural fumigation – i.e., in mills, storehouses, and other food processing facilities. A little history is important here. Done right, the phase-out process creates the market conditions to accelerate the penetration of alternatives. This worked successfully with chlorofluorocarbons (CFCs), for example: By setting a firm phase-out schedule and sticking to it, the Clean Air Act and the Montreal Protocol created the marketplace incentives for entrepreneurial firms to bring on alternatives – new propellants, refrigerants, solvents, etc. As a result, the CFCs, once considered irreplaceable, were virtually eliminated in less than 10 years.

But for methyl bromide, EPA has turned the phase-out process on its head. Now that sulfuryl fluoride has been registered by EPA and the states, the agency should have set a short, firm deadline to end the use of methyl bromide in structural fumigation. Instead, EPA asked itself the wrong question: How long would it take sulfuryl fluoride to replace methyl bromide *in the absence of a phase-out?* The agency concluded this would take eight years. So, by golly, EPA has signaled it will let methyl bromide use in structural fumigation continue for another eight years. But this was the wrong question. The right question is: How quickly could sulfuryl fluoride penetrate the structural fumigation market given the incentive of a rapid methyl bromide phase-out schedule? If EPA had asked the right question, methyl bromide use in structural fumigation could be ended in one or two years, rather than eight.

EPA's current approach is a complete reversal of the successful CFC phase-out process. Instead of hastening the methyl bromide phase-out and rewarding innovative farmers and businessmen who have risked capital to develop alternatives, EPA is protecting the ozone-depleting chemical and penalizing the responsible entrepreneurs.

Ignoring methyl bromide stockpiles. Now let's turn to EPA's faulty assessment of how much methyl bromide should be *produced* in 2005 and 2006. The U.S., together with the other Montreal Protocol parties, has repeatedly agreed that production or import of methyl bromide may be allowed after the 2004 phase-out deadline *only* if methyl bromide stockpiles are insufficient to meet critical needs. In both 2005 and 2006, however, EPA patently ignored data showing the existence of *massive* stockpiles.

Available data show that five companies (Great Lakes Chemicals, Albemarle, Ameribrom, Tri-Cal, and Hendrix and Dail) held stockpiles of *at least 22 million pounds,*

and perhaps a great deal more, at the end of 2003. EPA later revealed that there are actually *29* companies that hold methyl bromide stockpiles, suggesting that the total stockpiled amount is significantly larger. (See figure 3.)

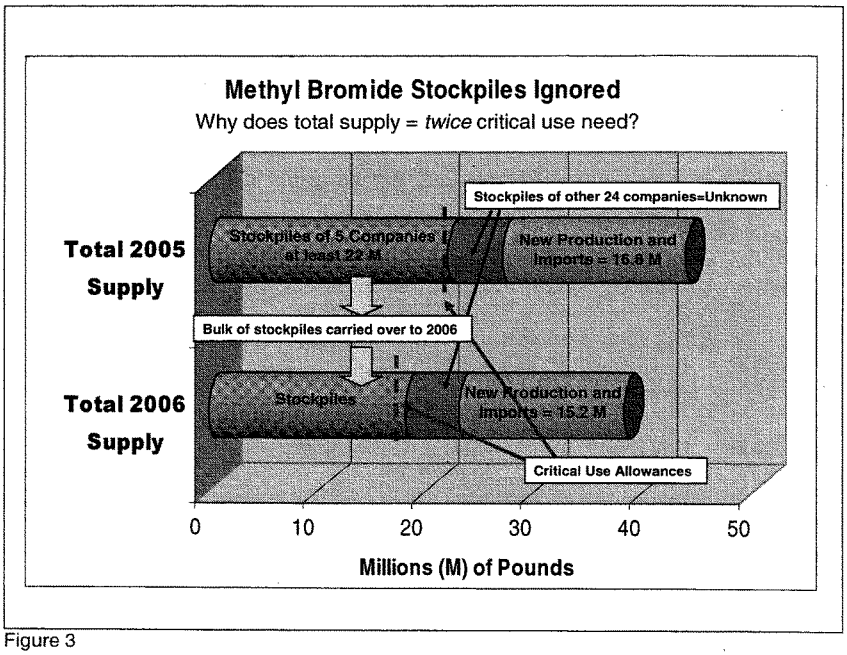

Figure 3

How do we know about these stockpiles? The truth is that methyl bromide producers, importers, and distributors have gone to great lengths to hide the size of their methyl bromide stockpiles from the Congress, their customers, and the public. But two years ago, in response to a request from Energy and Commerce Chairman Joe Barton, EPA informed Congress that "stockpiling has indeed taken place."[8] The EPA letter did not disclose the actual size of the existing stockpile, on the ground that the companies had

[8] Letter from Dona DeLeon, EPA Acting Associate Administrator, to Rep. Joe Barton, (February 10, 2004), *reprinted in Status of Methyl Bromide Under the Clean Air Act and the Montreal Protocol: Hearing Before the Subcomm. on Energy and Air Quality, House Comm. on Energy and Commerce*, 108th Cong. 92 (2003).

claimed the data to be confidential business information. The EPA letter did, however, include what it called "qualitative" information from which it could be deduced that at the end of 2003 the stockpile held by the five companies named above totaled at least *22 million pounds.*[9]

NRDC has gone to court to obtain full information on the aggregate stockpile data. EPA has conceded that the aggregate amount of stockpiles is *not* confidential business information and should be released. But the agency still has not released the stockpile data. What stands in the way is a pair of frivolous counter-suits brought by two companies who are trying to keep everyone – the Congress, their customers, and the public – in the dark about the actual size of the stockpiles held by all 29 companies. Their strategy appears to be to deceive their customers into thinking the chemical is in short supply – which helps them raise prices – while at the same time evading the prohibition on new production when stockpiles are sufficient to meet critical use needs. The U.S. Court of Appeals is expected to resolve these data disclosure issues very soon.

* * *

[9] The letter states, "EPA efforts to quantify the stockpile through discussions with a subset of users, producers and distributors of [methyl bromide] have yielded the conclusion that the stockpile, when combined with allowable levels during 2003 and 2004, is sufficient to enable access to levels of [methyl bromide] similar to those allowed to be accessed during 2001 and 2002, when the US was complying with the Clean Air Act's required 50% reduction in production and consumption." *Id.* at 92.

This passage yields the following calculation of the stockpile:

- 50% of the U.S. 1991 baseline level (the 2001-02 annual production limit),
- minus allowable levels during 2003 and 2004 (30% of 1991 baseline level),
- equals 20% of the 1991 baseline level,
- times two years (2003 and 2004),
- equals 40% of 1991 baseline level.

Forty percent of the 1991 baseline level (25,528 metric tons) equals 10,211 metric tons – or more than 22 million pounds. Other information obtained by NRDC under the Freedom of Information Act independently confirms this calculation. We received a document with a column of 5-digit numbers denominated in metric tons, including entries for the stockpile. The 5-digit stockpile figures were "blacked out." The smallest possible 5-digit number, however, is 10,000 metric tons, or 22 million pounds.

So despite the claims you will hear today, the truth is that *far less* methyl bromide is really needed for critical uses than the industry or the government claims, and *far more* methyl bromide is available than necessary to meet those needs. The excess production and use is causing real harm – deaths and illnesses that do not have to happen. The U.S. critical use exemption process *is* broken: It is allowing far too much production and use of methyl bromide, not too little. We need to comply with our own laws and treaty obligations, not break them.

The methyl bromide phase-out process can work – just as it did for CFCs and other chemicals earlier – to stimulate the development and adoption of effective alternatives. We must stick to this effort and cut back on EPA's grossly unwarranted exemptions.

Thank you for the opportunity to address these issues.

Mr. ISSA. Thank you.

Mr. Doniger, one question that I have is about these figures on use. Isn't it fair to say that we do not really track use as much as we track purchases; that we know what was bought, but we really do not have a complete understanding of what was used, particularly prior to 2005, because you had users who were not critical. Maybe Mr. Wehrum can answer this as well. Is that true? Before people had to get a specific critical use, we knew how much was sold, but did we really know exactly how much was used?

Mr. WEHRUM. The U.S. EPA and the U.S. Government does not track use.

Mr. ISSA. OK. So, Mr. Doniger, it would be fair to say, because I come from the electronics industry, a lot of—I mean, inventory imbalances I understand, and stockpiles I understand—but if I understand correctly, in 2003 at 17 million, if I were one of the noncritical use companies, I would be using up my stockpiles knowing that in 2005 I am not going to be using it anymore. So I am going to be in a phaseout process of going to alternatives.

Isn't it true that could account for some of this reduction?

Mr. DONIGER. Well, let me say a word about these figures. You are right that they are kind of inventory balance at the high level. They represent the production and import, plus the amount of the stockpile that was drawn down, the difference in the size of the stockpile between the end of 2002 and the end of 2003. EPA put those three numbers together and called them use in a document they produced and they released to us.

Mr. ISSA. I have no problem with this being somebody's best guess.

Mr. DONIGER. Sure. Second——

Mr. ISSA. I just want to look at this and say, if I understand it correctly, 2003 to 2005 is an interesting anomaly in that it goes up. Since 2006 falls down to a number—and at the current rate of decline, 2007 is going to be a number lower than 2003—to a certain extent, the anomaly is behind us. We are making progress toward the zero number. My understanding is critical use goes on until 2015 in the United States, and unfettered use under the protocol goes on—and maybe this is for the EPA—for China and India until 2015. Isn't that correct?

Mr. WEHRUM. That is not my understanding, Mr. Chairman.

Mr. ISSA. My understanding is China, India, and other developing countries, including virtually all of Africa, are uncontrolled and unlimited and unreporting.

Mr. WEHRUM. Developing countries that are parties to the Protocol do, in fact, have commitments under the Protocol, initially to——

Mr. ISSA. Which is 2015.

Mr. WEHRUM. Well, initially to cap usage based on historic levels, and then in the year 2005, an obligation to cut usage by 20 percent became effective, and then that remains in effect until 2015, when the prohibition comes into effect for developing——

Mr. ISSA. But isn't it true that we don't know China's consumption or production because they don't report.

Mr. WEHRUM. My understanding is China is a party to the Protocol, and they are subject to the commitments that I just described

for developing countries that are members or parties to the Protocol.

Mr. DONIGER. If I may add, Congressman——

Mr. WEHRUM. Well, Congressman, just to complete the answer, there are countries that are not parties to the Protocol, and I believe that is part of what you are getting at.

Mr. ISSA. Mr. Wehrum, I guess my overall concern is that I want to see the end of ozone-depleting chemicals as soon as possible. I agree with Mr. Doniger in what I think he is getting to, which is I do not want to see stockpiles around that one way or the other we have to get rid of in the future. I want to see that by the time we get to the final cutoff there is none left because it would be absurd to have stockpiles that you then have to figure out a way to get rid of or ultimately vent and you hurt the ozone layer.

However, my understanding is with the countries that are presently major agricultural countries that either are not reporting as India is—I mean, India does not report to the IAEA. They actually do not tell us about their nuclear program even though they are supposed to. They are one of the non-reporting countries, as I understand, on this.

We have an inherent question, and it is a question for the ozone layer, which is if the ozone layer isn't getting any better, could it be that, in fact, we are not—the United States has dramatically reduced its use, but that does not mean that the world has reduced its use at all unless we have full compliance or at least full reporting.

Mr. WEHRUM. Mr. Chairman, to complete the thought from a moment ago, I think of the situation as three bins. There are parties to the Protocol that are developed countries, such as the United States and the European Union, for which there are well-defined obligations, and commitments are tracked very closely. The second bin I think about are parties to the Protocol that are developing countries, and they have the obligations that I described a couple minutes ago. Then there is a third bin, which are countries which are not parties to the Protocol, and their activity—they do not have an obligation to report whatever their activities are with regard to methyl bromide utilization, and they are not subject to commitments that the other parties of the Protocol may be subject to.

So the sum of all that is there is some usage in the world that we do not track and that is not reported on a regular basis. It is my understanding, based on what we do know, that it is a relatively small amount of usage as compared to that used by the parties to the Protocol, but we do not have complete information, that is true.

Mr. ISSA. As a San Diegan, it may be anecdotal, but we have seen a huge part of our flower industry transferred from San Diego to Guatemala, Ecuador, and these other countries. The Europeans have transferred to Africa. It is no accident that they have transferred from this country, which is reducing dramatically, to a country in which it is substantially unregulated.

Mr. DONIGER. Congressman, I think it would be possible in the supplementary period to get you information on which countries—certainly which countries are a party. There is no important country economically or agriculturally which is not a party. It will also

be possible to get you up-to-date information on who has been reporting and who is not.

The third thing I think it is important to get to you and I know the EPA could supply—we will try as well—is an indication of which developing countries are way ahead of schedule in reducing methyl bromide, because they participate in work under the Multilateral Fund, and they make contract agreements, which they have to follow through on and which they do report on, to reduce their usage in exchange for smaller amounts of transitional financial assistance.

So there are quite a number of developing countries, including some in the regions you mentioned—Africa and Central and Latin America—which are way ahead of schedule, and they started from a much lower base than we did.

Mr. ISSA. Mr. Wehrum, I would appreciate it if you could try to get us the followup information, particularly as to what we know, and what we don't know—sort of each of the baskets—because ultimately we signed on to a global protocol intended to save the entire world, and it is only as good as the total reduction.

One question that I would have, Mr. Wehrum, when you said that the EPA had worked with other member countries to improve the process, I would be interested to hear what has been accomplished, where you see some improvements, and if you could give us some examples of that.

Mr. WEHRUM. Certainly, Mr. Chairman. And to your previous point, we are certainly happy to put together the information that you requested, and we will get that to you in a timely manner.

I believe significant improvement in the process has been made, and mostly with regard to how the MBTOC operates. There were legitimate concerns about the transparency of the process, concerned about the way in which the decisions were made by the MBTOC and the ability of parties to understand—and stakeholders, not just parties to the Protocol, but stakeholders——

Mr. ISSA. I was there for Thanksgiving.

Mr. WEHRUM. I applaud your commitment, Mr. Chairman.

So with regard to the operation of the MBTOC, improvement has been made. The MBTOC is better about documenting the decisions that they have made, and I think evidence of that is in the last consideration of the 2007 critical use exemption where we did not get an "unable to assess" from the MBTOC. So that was an improvement, a recognition of the improvement in the process.

MBTOC has been encouraged to seek more freely information from stakeholders and those who use methyl bromide and have petitioned for the use of methyl bromide under critical use exemptions. They have been encouraged to provide an indication earlier rather than later of their inclination with regard to the applications that are made, and that helps protect against late hits and give people an opportunity, if they think the MBTOC is pointed in the wrong direction, to try to provide additional information and input to the process.

So our belief is the sum of all of that is, we think the process is working better, and as I said in my testimony, it is not a perfect process, but we are making improvement over time, and it is worth pointing out it is still a relatively new process. We have not been

at that for very long. I think we have learned a lot, and we will continue to apply what we have learned and continue to try to make it better.

Mr. ISSA. I appreciate that, and we are going to undoubtedly do a second round, but I want to ask one quick exit question of Mr. Bair and Ms. Castellano.

I have noted that in 2001, basically you were paying roughly $1.80 a pound for methyl bromide. In 2002, that doubled to about $3.50, and I understand that currently it is about $7 a pound.

I am constantly being told by providers or potential providers of alternatives that they are cost-effective, that their alternatives are reasonably priced or are reasonably close in total cost to methyl bromide.

The interesting thing was that I started this process in about 2002, when it had just jumped up to about $3.50, and they said they were close. This year, they are still saying they are close, and you have a $7 methyl bromide.

Could you just give us your view of—and obviously, I understand that if they worked equally well, you would probably be using them regardless of price. But on those which we are being told are alternatives in some narrow or sometime use, can you give us sort of an understanding of the price points? Because the estimation that I have is that methyl bromide will double again in the next year or two, that inherently as there is a reduction in who is making it and so on, the price is going to spiral upward.

Mr. BAIR. I think that——

Mr. ISSA. I hate to get into price here.

Mr. BAIR. No, but I think your point is a valid one because despite, you know, the comments that Mr. Doniger has made about stocks, Econ. 101 would suggest that the doubling of the price of methyl bromide in the last 3 or 4 years would suggest that those stocks aren't all that significant. The prices have quadrupled since the baseline year, and as you pointed out, doubled in the last 3 years. And that is also contrary to what we continually hear from the U.S. EPA, who say, Gee, you know, these stocks must be dramatically large because the price of methyl bromide is going down. And that does not fit with what anybody in the industry or any of the applicators know to be true. The price, in fact, is going up and has gone up dramatically because we are producing less of it—and, frankly, using far less of it. So the market is a tiny sliver of what it was, you know, a few years ago.

Mr. ISSA. Ms. Castellano.

Ms. CASTELLANO. I think that is a good point, but there is a misconception that we are using methyl bromide because it is the cheap alternative and we do not want to get into other alternatives. That is absolutely not true. If there was an alternative out there that worked for us, we would absolutely use it. In our case, it costs now upwards of $2,000 an acre to fumigate a field with methyl bromide, and that is before we have put anything in the ground, grown it, and processed it.

So it is not a cheap product. It is just the only thing we have to use. Some of the alternatives that have been suggested aren't good enough. They also require two, three, five applications, and there is time that has to be put between those applications before

we can put our crop in the ground. We cannot do that. And it is also in many situations not safe for the workers to be applying an alternative four or five times, whereas the methyl bromide is one time.

So, absolutely, the price is getting out of control, but it is still our only alternative out there, and we have to keep using it.

Mr. BAIR. Also, Mr. Kucinich when he was here, he referenced organic, and, you know, that is a growing segment of the market. There have been mills that have attempted to use environmentally friendly alternatives such as high heat, for example. I am aware of a mill in New York State that used high heat and caused significant structural damage to the facility, which then was very expensive to fix.

We know high heat kills insects. Cereal plants have been using it for 50 years to kill insects. But we do not generally have the capacity in a flour mill to turn the heat up to 140 degrees and hold it there for 24 hours in order to kill insects. It can be done. It is extremely expensive, and there are other considerations, such as structural damage to your facility, that cause safety considerations.

Ms. CASTELLANO. Congressman Issa, could I also make a comment on the comment that was made about organic strawberries?

Mr. ISSA. Sure.

Ms. CASTELLANO. Being from California and discussing strawberry growers in California, we are cut flower growers. But we are surrounded by strawberry growers, and there tends to be a lot of comments made about organic strawberry growers in California. And I want to clarify something for everyone to understand. When strawberry growers claim that they are organic, that always doesn't mean exactly what we think it means. What is happening to strawberry growers in California on a large level—I am not saying it—it is not all 60 of the growers, but plugs are being grown in South America. They are being grown in Mexico. They are being grown in Guatemala. They are being grown—and what plugs are in the agricultural industry is a plant is grown from a seed somewhere else. You wait until you actually have a plant. You relocate it and plant it in a different farm.

What is happening for strawberry growers at a tremendous rate in California is plugs in Mexico and Guatemala, being highly fumigated with methyl bromide and other chemicals that EPA does not allow to be used here in the United States, is producing a plant that is then brought to California, planted in California ground, and then is organic in California ground.

So when we say someone is an organic grower, we need to be clear if that plant has been organic from day one or if the California ground that it is growing in is organic.

So I just want to clear up that misconception that often gets confused in this discussion.

Mr. ISSA. Thank you.

Ms. Watson.

Ms. WATSON. I again want to thank you, Mr. Chairman, for holding this hearing so we can have these open discussions.

I would like to address my comment to Mr. Doniger, and to the rest of the panel, I want you to know that for 17 years, I chaired the Health and Human Services Committee in California in the

Senate. And the last 3 years of my tenure there, we had methyl bromide debates in front of the committee, and every time the issue came—and we had them in a room that held 750 people. A great many of them were advocates, a great many of them were critics. And when all the facts were laid in front of the committee of nine people, they voted the methyl bromide bill down. It was done three times. Maybe we spent 124 hours, maybe more.

On the last day of the session, the bill was pulled out of my committee at 4 a.m., taken up by the pro temp of the House, and let out. I resigned my chairmanship because I was thoroughly convinced that the public's interest was not taken into consideration. It was the economic interest of the growers alone.

What I was striving for was a balance between the two, because as Chair of Health, I wanted to see policy pass out of my committee that was in the best interest of the largest number of people.

So my questions go to you, Mr. Doniger, with that background, and remember what my interest is: Health first, and then balancing the health and economic benefits second. What impact does a large amount of exemptions have on the farmers who try out the alternative chemicals or pest control techniques and on the companies that make them?

Mr. DONIGER. Well, I think what is happening is a major discouragement to those who try the alternatives and those who try to provide the alternatives. And let me give as an example and a contrast how the CFC phaseout worked out. There were firm deadlines and companies that tried—that went into the alternatives, either as users or as providers, counted on the phaseout deadlines sticking. And they did stick and the price went up somewhat for the old chemical, and the need went up for the new chemical, and it created the opportunity for entrepreneurs, both in the users and the producers, to come up with these alternatives. And it worked very well. We had an almost complete phaseout of CFCs in less than the 10-year period allowed for the original phaseout.

What is happening with methyl bromide is that the rug is being pulled out from under the providers of the alternatives and also from under those who experiment with the alternatives.

Ms. WATSON. Would you clarify? When you say the rug is being pulled out, who is pulling the rug out?

Mr. DONIGER. When the deadlines are extended by way of granting large exemptions, the message that is sent to the users of the products is stick with the old, you don't need to change. And the market prices are not there for the alternatives.

So I will give you an example from the milling industry and how this is working out right now in the 2006 rules that EPA just issued. I am sure Mr. Bair will have his own perspective on this. Sulfuryl fluoride is a chemical that is now registered by the EPA, and in all or virtually all the States, for use in mills and the other food-processing facilities to kill the bugs as an alternative to methyl bromide.

Now, in my opinion, EPA should have said, "now that sulfuryl fluoride and a list of other materials that are in Mr. Wehrum's testimony are available for that set of uses, we don't need methyl bromide anymore, let's give them a year, maybe 2 years, and end the use of methyl bromide in that category of structural fumigation."

Instead, what EPA said was: How long will it take sulfuryl fluoride to penetrate the market if there is no methyl bromide phaseout? And the answer EPA came up with was they would make 15 percent of the market inroads each year. So it would take, 15 percent a year, 8 years for sulfuryl fluoride to replace methyl bromide, and that is the length of time EPA has indicated it is prepared to leave methyl bromide in place for the structural fumigation.

So it is backward. Instead of the phaseout driving a faster penetration of sulfuryl fluoride, it is holding back the penetration of sulfuryl fluoride because it is protecting those who are using methyl bromide and supplying methyl bromide and letting them continue with business as usual. That is not how we did it with CFCs. If we had done it that way with CFCs, we would still be stuck with CFCs.

The way to get rid of these chemicals in an orderly way is to set a phaseout schedule and stick to it and reward those who try the alternatives and provide the alternatives instead of undercutting them.

Ms. WATSON. Let me then go over to Mr. Wehrum. You are representing the EPA. The United States led the international effort to save this protective ozone layer that we are so concerned about through the development of the Montreal Protocol. Right?

Mr. WEHRUM. Correct.

Ms. WATSON. OK. And since President Reagan, every President has upheld our commitment under this treaty, which has been widely acclaimed as the most successful environmental treaty ever, and apparently it is showing some results.

In previous hearings, administration witnesses have affirmed that President Bush also strongly supports the treaty. In 2003, witnesses from both EPA and the State Department stated that they did not believe any changes to the Montreal Protocol or current law were necessary.

Now we have a bill, H.R. 1257. Will the administration take a position in opposition or support of that bill? Or will they violate their commitments under the treaty? Do you have any idea?

Mr. WEHRUM. The administration has not taken a position on that bill, Congresswoman.

Ms. WATSON. Has the administration seen the bill?

Mr. WEHRUM. Yes, ma'am. Yes, Congresswoman.

Ms. WATSON. Could you indicate to this committee, since we are holding this hearing, just where the administration is leaning on it? Could you do that for us?

Mr. WEHRUM. I am unable to do that today, Congresswoman.

Ms. WATSON. No, not today. I mean could you gather that information, if you can, and inform us here at the committee?

Mr. WEHRUM. I am certainly willing to consult with my colleagues in the administration and determine if we can develop a statement on the legislation. I am willing to do that, Congresswoman.

Ms. WATSON. Well, I again want to commend the Chair because these are the kinds of oversight hearings we need to have so we can be on the same page with our discussions, because remember, this is an international protocol we are talking about, and that is why I was asking Mr. Doniger who, you know, is responsible. And

I don't know whether the administration is in accord with H.R. 1257 or they have other changes. But we would like to have some indication of where they stand on that.

H.R. 1257 would amend the Clean Air Act to provide that for 2007, the amount of methyl bromide allowed for critical uses would be equal to the amount requested by the United States at the international negotiations. And this is more methyl bromide than the parties to the Protocol authorized for the U.S. critical use for that year. And if we adopt this bill as law, then we will be in violation, so that is why we need some indication up front as to where the administration is coming from. We would appreciate any kind of feedback that you could give us.

If we were to violate the Montreal Protocol, isn't it likely that other countries will also feel free to do that? If we do not comply, why should they? And we do know—and you are going to provide us with the list of those countries, particularly developing countries, that are not signees to the Protocol.

So I wanted to throw that out to you so when you report back to us, we can have maybe a little clearer picture.

I have a couple more questions, Mr. Chairman, if you——

Mr. ISSA. Go ahead. Get it off your chest.

Ms. WATSON. OK. Since we are a party to the Montreal Protocol and it has been since the time of President Ronald Reagan signed onto this. Now, if H.R. 1257 were enacted, it would certainly place the United States in noncompliance. What I would like to see, Mr. Chairman, is that we hold more of these hearings. I think the representative Ms. Castellano makes a point when she clarifies what we mean by organically grown. Is it the soil that pesticides have been spread on here, or are they from countries that are in noncompliance?

Mr. ISSA. It is like the American flag with "Made In China" on it.

Ms. WATSON. Exactly. I think these are things that we need to know and we need to have this information when we discuss public policy. And so I hope we will have followup hearings to this, too.

This is the last question to Mr. Doniger. The United States has an international reputation as a leader, and as a leader in protecting the ozone layer. What is your view if such a bill as H.R. 1257 were signed into law? What would happen?

Mr. DONIGER. Well, I do think it would place the United States in violation because instead of following the process for exemptions, we would simply be saying we get whatever we want, and that is not in compliance with our treaty obligations.

I think more generally the United States has hurt its reputation in the past several years by the vigorous pushing of these exemptions without full disclosure of information. The stockpile condition, for example, is a requirement that the parties imposed that the United States agreed to that there not be production to the extent that the stocks were sufficient to meet the need. The U.S. Government has not disclosed the stockpile information to the public here, to the Congress here, except in one veiled letter, to us, or to other countries. And it is hurting the U.S. perception of leadership and responsibility in the eyes of other countries, and this has ramifications in other areas of our foreign policy as well.

Ms. WATSON. Let me just intervene here and I am going to address this question to the Chair and maybe to the attorney. Is there any reason why this information needs to be top secret and not shared with us here in Congress?

Mr. ISSA. No. I am informed that——

Ms. WATSON. It is a privacy issue?

Mr. ISSA [continuing]. Asking people what they own, you know, exceeds the normal request without a purpose.

If I can actually clarify something with the EPA, no matter how much you have in your stockpile, if you do not have a use permit, you cannot use it. Isn't that correct? So a stockpile becomes worth zero if—for example, the people who do not have critical use exemptions, they cannot use up their stocks just because they happen to have it. Isn't that correct?

Mr. WEHRUM. That is not correct, Mr. Chairman.

Mr. ISSA. They can actually continue—does that mean that there are people who may be using methyl bromide without a critical use exemption simply because they have stockpiles. Is that correct?

Mr. WEHRUM. That is correct.

Mr. DONIGER. It is not that they have the stockpiles. They are purchasing the stockpile from the same suppliers. Generally, farmers do not keep their own stockpile. And the same I believe is true of the millers and other users. They buy the stocks, they buy the material with the service from applicators.

Mr. ISSA. With the gentlelady's indulgence, that I think is a question that where the EPA stands on it and how you are going to ensure that if we say that we are only using X, that we not be using X under the critical use and Y for other purposes. I certainly think that this is something that on a bipartisan basis we would like to know what your program is to prevent that in the future.

I am not sure that I need to know how much somebody has in their garage. What I do need to know is: Is it being used? And if so, why would we continue to tolerate people who no longer have a valid use for it because there are alternatives or because there has been a complete phaseout in their category, and yet they are still buying and using it? I think that flies in the face of Mr. Bair and Ms. Castellano saying we are doing all this paperwork to justify why we still need it and we welcome an opportunity to use an alternative. That is in the system. That is in the Protocol four Presidents have all signed onto. But I don't think anyone has signed onto this back door that Mr. Doniger talks of.

Mr. WEHRUM. If I may, Mr. Chairman, a couple of observations. One is the amount of stocks is finite and is diminishing over time. We have, in fact, as an agency collected information on the amount of stocks in an effort to understand how much there is and how that number changes over time. But we are also bound by very strict confidentiality requirements as it applies to business confidential information.

Mr. ISSA. But you know and you cannot tell us?

Mr. WEHRUM. The matter is actually currently under litigation. The Natural Resources Defense Council sought this information through a Freedom of Information request. Certain of the businesses that supplied information contested the agency's initial determination. Our initial determination was that the aggregate

number was a number that we believed that we could share and not violate our confidentiality obligations. But certain companies that provided some of the underlying information disagreed with that, and so the matter is currently a matter of litigation. The——

Mr. DONIGER. If I——

Mr. WEHRUM. Please, let me finish. The last thing I will say is, it is not a shock that stocks are out there. That is the way the Montreal Protocol has operated. A good example is on the refrigerant side where there are plenty of cars on the road that use banned CFCs in their air conditioners, and if you have one of those cars today, you can go buy replacement refrigerant off the shelf. That is not illegal. It is not wrong. There was an expectation that the amount in stock would diminish over time, but that there was a reason in that case to allow people to continue to maintain cars that were using the banned materials.

Mr. ISSA. The U.S. Air Force is still flying our Lear 31s or 35s that we bought in the 1970's, and they still have old air conditioners.

Mr. WEHRUM. So the fact of the existence of stocks is not unusual or unprecedented, just in terms of how this treaty and how this Protocol is operated, and it has been a factor in our decision-making. So it is an issue that we are well aware of.

Mr. DONIGER. Two quick points, if I may.

One, the EPA and the NRDC are in agreement that the total number of the stockpile is not confidential, but until this litigation can be resolved—and it is litigation brought by two of the suppliers, who are not prosecuting their cases, they are doing nothing except putting a hold—it is the equivalent of a senatorial hold on the disclosure of this information.

Mr. ISSA. Thank you for saying Senate.

Mr. DONIGER. Yes. [Laughter.]

Mr. DONIGER. And the producers and distributors, who never appear before these hearings, are quite content to keep the information secret, not just from us, not just from other governments, but from the users, because it makes it easier to charge higher prices if you can convey to the users and everyone else the perception that the material is really scarce.

I have a document from one of these companies, which I will make available to the committee, which says use the new production first, keep the stocks in reserve, pass the stocks over to the next year—absolutely opposite of normal inventory practices, which is rotate your stock, use the old stuff first. This is an evasion——

Mr. ISSA. Unless you are in the wine business.

Mr. DONIGER. That is true. And methyl bromide doesn't get better as it gets older. So the other point is that it is true that stocks of other chemicals are—it is not that the stocks are regulated. It is that the new production is supposed to be limited to the amount that cannot be supplied from the stocks. With CFCs in older air conditioners, we do not have any new production, and people do use the stocks to meet the needs of old cars and old Lear jets. But with methyl bromide, you are supposed to take the stocks into account and reduce the amount of new production so that it does not increase beyond what is really needed—not double what is needed, and so that is the error here. That is why we have gone to court.

We are expecting a decision from the court of appeals any week now, which would address the stocks issue, the excess assessment of use, and also the data disclosure issue.

Mr. BAIR. Mr. Chairman, may I speak——

Mr. WEHRUM. Mr. Chairman, if I may——

Mr. ISSA. Certainly, as long as we let——

Mr. BAIR. Mr. Doniger is getting liberal use of your time, and I would like to have an opportunity to respond at some point.

Mr. WEHRUM. Just, Mr. Bair, with your indulgence.

Mr. ISSA. The Government first.

Mr. WEHRUM. Just a point. The U.S. Government, of course, does not agree with everything that Mr. Doniger just said. There is litigation on many of the points that he just described related to the rule that we promulgated to adopt the critical use—the CUE process within our regulations and to adopt the first of the critical use exemptions. So we have defended ourselves in court, and we look forward to a decision on the merits by the D.C. Circuit.

Ms. WATSON. Let me just——

Mr. ISSA. Mr. Bair, and then——

Ms. WATSON. Yes, let me just comment on what he just said. That is the reason why I asked if you could report back to us, because we don't know where the U.S. administration stands on the changes that would be required in the law. So if you can clarify, just give us information. And when I asked about the stockpiles, I was talking about the overall supplies. I am not talking about individual users and individual inventories. I just wanted to know—and we do have a chart. If you don't agree with everything that Mr. Doniger says, maybe you can put out your own chart just for our information. Is that something you can do?

Mr. WEHRUM. As long as it does not violate our confidentiality obligations under the law.

Ms. WATSON. Oh, come on. I just explained that. Don't give me that kind of rhetoric. What I said is—you know, there is confidential information. That is not what I am asking for. Can you give us the figures of the overall supply, stockpile?

Mr. ISSA. That is what is in litigation, is what he is saying. That is actually what is in litigation.

Ms. WATSON. So you don't go along with what he has here?

Mr. WEHRUM. Well, the U.S. Government's position was that the aggregate number we determined did not need to be considered confidential business information.

Ms. WATSON. OK, good. Can you give us what you have?

Mr. WEHRUM. No, ma'am, because our position was challenged in court, and we have to await the decision of the judge before we can determine how to proceed.

Mr. DONIGER. I have to wait. I am not sure you have to wait.

Mr. ISSA. Well, look, I am going to sort of take a little bit of liberty here. I have heard that you expect it within a couple of weeks. We will make every effort to leave the record open, but even if it is already closed, I assure you we will welcome the information when it becomes available.

I will take the liberty as chairman of saying that if it is not forthcoming in a reasonable period of time—in other words, if the court stalls—then I do believe it is within the interest of this sub-

committee that we have a separate fact-finding on the stockpiles. I think we have learned enough today about the stockpiles that, although I do agree that maybe the Protocol is spending too much time on stockpiles, when it comes to this subcommittee ensuring that those who have a legitimate use for methyl bromide are not simply getting it out of substantial stockpiles or, what I think I heard Mr. Doniger say, the potential that there is an excess production based on excess justifications for critical use that then may potentially go sideways through stockpiles into other people's hands. This subcommittee is interested in the efficiency of Government, the effectiveness of Government, and the adherence to the Montreal Protocol. This hearing was called in no small part because it is the belief of this subcommittee—this chairman, at least—that, for example, the EPA's taking until January 31st when you had 6 months to come up with a rule put private enterprise at an unfair disadvantage because you literally had fumigators who were not able to do what they should be able to do, or at least were afraid they would be fined. That should not be the way we do business.

It is the intent of this subcommittee to ensure that while we adhere to the Montreal Protocol, on the flip side, the other parties to the Montreal Protocol adhere to the letter of the law as well. I think that is where Ms. Castellano particularly says it, which is these exemptions are in the Protocol, and if you don't mind, I am going to close my question, Mr. Doniger, specifically: I am very much of the right age and background to understand when we did away with both our aerosol cans that were ozone-depleting and particularly with freon. When an alternative existed, the only problem was having machinery that then worked with the alternative, because, unfortunately, old air conditioners were not tolerant of the new freon, you know, Freon 12 and so on.

Today, wouldn't you agree that although we have made a lot of progress, science has not produced a universal alternative to methyl bromide for all uses from a chemical standpoint, leaving 140-degree heat in a factory out? Isn't that sort of the state today?

Mr. DONIGER. Well, I agree this was true with CFCs as well, that you had one chemical that was replaced by a suite of chemicals. Some of them were not even in the same family of chemicals. And that is what is happening—that is what has happened with each ozone-depleting chemical, and that is what is happening with methyl bromide.

So although this chemical iodomethane is pretty close, if it does get registered, to a drop-in alternative, it isn't necessary to have a drop-in alternative, and we don't expect to have a single one that covers the field. What we do think is that you can pick off niches of the market, niche by niche, and get down to the hard cases much faster than we have.

Mr. ISSA. We look forward to working with you, the other panelists, and other contributors to this, to find those alternatives and to ensure—and particularly for the folks in industry here today—that this subcommittee will do everything it can to streamline the process and to ensure that the exemptions continue to be granted in a timely—well, become granted in a more timely-fashion to the extent that there is not an alternative.

I think the gentlelady and myself would both join in saying when there is an alternative, we look forward to your companies embracing it at the earliest possible time and would also want to be just as strong a watchdog on compliance as we are on the agencies.

The gentlelady has one more round.

Ms. WATSON. I would like to ask Mr. Doniger if he could do a little research on my behalf. As I mentioned, in my California experience we had farmers come in, and these were food farmers. These were not florals. It might be a whole different story. But if you could do a little research and see what the alternatives some of the farmers in California are using to methyl bromide, I would like to have that information, if you would.

Thank you very much, Mr. Chairman.

Mr. ISSA. Well, thank you, Ms. Watson. I will dispense with a full closing statement and simply thank our witnesses for not only thoroughly delightful opening statements, but I think a lively discussion that took us not just to the issue that we came here for, but as I requested, I think you have done a good job of opening up additional areas for this subcommittee to be involved in.

I must admit I am not sure my authority over organic farming is as comprehensive as I would like, but I will speak to the chairman about whether we have that, because I do believe that we have to make sure that we are a committee of facts, and if there are organic alternatives, I am thrilled. But if we are simply manufacturing in another country using other chemicals and then claiming something is possible, I have been down the road in the electronics business. For many years I had people who said "Made In America," but they imported a complete stuffed board and then put it in a box in the United States and proudly said "Made In America." That is not the right way to increase American jobs. It is certainly not the right way to justify organic agriculture.

So as I said earlier, we will hold the record open for at least 2 weeks. I will make every effort to hold it open until we can include an aggregate stockpile figure. I would welcome all of you to give us your additional thoughts separately on the stockpile situation, and particularly on whether or not there is a substantial amount of clandestine use outside of critical use exemption. This committee has very much supported—at least the chairman has supported—critical use being retained, but that is the front door. We will be interested, and with the gentlelady's permission, I expect we will be following up on making sure that back-door use—in other words, ozone-depleting that is not critical and required—is reduced.

And with that, I thank you and this hearing is adjourned.

[Whereupon, at 3:33 p.m., the subcommittee was adjourned.]

[The prepared statement of Hon. Dennis J. Kucinich and additional information submitted for the hearing record follow:]

Statement of Rep. Dennis J. Kucinich
Subcommittee on Energy and Resources
House Committee on Government Reform

Hearing on "Methyl Bromide: Are U.S. Interests Being Served by the Critical Use Exemption Process?"

February 15, 2006

I was dismayed when I learned that today we would be discussing efforts to perpetuate – and possibly increase -- the use of methyl bromide. Continuing to allow it to be manufactured and used is bad for the environment, bad for human health, bad for international relations, bad economics, and is simply unnecessary.

Methyl bromide has been responsible for a significant amount of the degradation of our protective ozone layer. In 2005, the size of the resulting hole in that layer over the Antarctic reached 9.4 million square miles, an area almost as big as the combined areas of the U.S. and Canada, according to NASA. Current estimates say that it will take another 50 years for the hole to repair itself.

Too much UV-B, which is filtered by the ozone layer, causes cataracts and suppresses our immune systems, making us more vulnerable to viruses and bacteria. It also contributes to skin cancer. It was this threat to human health that was a major reason that the international community agreed to ban it. It was a display of unprecedented cooperation in the face of an environmental threat.

Methyl bromide puts our own workers and consumers at risk too. When it is injected into the soil, it kills almost every living thing in the soil. It is no wonder that it also causes chronic health problems for the workers who apply it and the nearby communities who are also exposed to it. Exposure has effects on the neurological system including functional impairment, lethargy, twitching, tremors, and paralysis in extreme cases. It has also been linked to prostate cancer and birth defects in some studies.

Continuing the manufacture of methyl bromide is bad economics. Since the international community agreed to phase out methyl bromide, companies who play by the rules have been planning for its phaseout. They have incurred real financial costs by investing in alternatives, anticipating the phase-out required by the Montreal Protocol. Failing to adhere to the US promise to phase out methyl bromide puts these companies who were playing by the rules at an unfair competitive disadvantage. Those who do the right thing and obey the law should be rewarded for their good faith efforts, not punished.

Consider the international relations implications as well. An attempt to let the U.S. allow methyl bromide to be used without going through the specified channels -- like other countries are required to do -- would further harm our standing in the international community. It sends a signal to other countries that we will only honor our agreements until we change our mind. It harms negotiations on future agreements. ~~It furthers the stereotype of~~ the US as ~~the bull in the proverbial global China~~ shop.

The EPA is currently trying to address the methyl bromide issue by substituting chemicals, like methyl iodide, that aren't as harmful to the ozone layer but are still highly toxic. Instead, we need to look to alternatives for pest control that not only preserve the ozone layer but also protect worker health, community health, consumer health, and ecological health. In fact, that's exactly what Americans want.

One of the biggest growth industries right now is organic food. According to the Congressional Research Service, "The annual rate of market growth since 1990 has remained steady at about 20%." When given a choice between food grown with toxic chemicals or food grown organically, people choose the latter, especially when the price is comparable, which is increasingly the case as economies of scale become more prevalent.

One of methyl bromide's biggest uses is for strawberry crops. Jake Lewin, director of marketing for California Certified Organic Farmers says "... strawberries can be grown without pesticide. We've got 60 growers who don't use (methyl bromide)... The bottom line is small and large growers have successfully produced strawberries without pesticides." [1]

So we are talking about yielding to the management of chemical producers and agribusiness -- who by the way rarely have to apply the toxic pesticide themselves or live in the adjacent communities -- at a drastic cost to our health and that of the earth. It speaks to a systematic deference to corporations at the expense of the biological systems on which we intimately

[1] http://www.santacruzsentinel.com/archive/2005/December/01/local/stories/01local.htm

depend for life. It is unwise and unnecessary. I call for the immediate and permanent phase-out of methyl bromide.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 62006

OFFICE OF
AIR AND RADIATION

The Honorable Darrell Issa
Chairman, Subcommittee on Energy and Resources
Committee on Government Reform
U.S. House of Representatives
Washington, D.C. 20515

Dear Representative Issa:

Thank you for the opportunity to testify on February 15, 2006, on behalf of the Environmental Protection Agency, the Department of State, and the U.S. Department of Agriculture, regarding methyl bromide and the critical use exemption process. I am pleased to enclose responses to questions that you and Ranking Member Diane Watson raised during the hearing.

I appreciate the opportunity to respond and hope that you will find the enclosed information helpful. If you have further questions, please contact me or your staff may contact Ronna Landy, in EPA's Office of Congressional and Intergovernmental Relations, at (202) 564-3109.

Sincerely,

for Elizabeth Craig

William L. Wehrum
Acting Assistant Administrator

Enclosure

cc: Ranking Member Diane Watson

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EPA Responses to Questions from February 15,2006
Hearing on Methyl Bromide
House Committee on Government Reform
Subcommittee on Energy and Resources

(1) **Issa: Please provide information on use and phaseout schedules for the developing countries.**

In 1992, methyl bromide (MeBr) was added to the list of controlled substances under the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol or Protocol). At first, the Parties to the Protocol did not establish a MeBr phaseout date for developing countries. However, in 1997, when industrialized countries agreed by consensus to accelerate their MeBr phaseout date, the developing countries agreed to a complete phaseout of MeBr consumption by January 1,2015, subject to exemptions such as the Critical Use Exemption which the United States currently utilizes in the post-phaseout period. Developing countries also agreed to a freeze in production and consumption relative to their historic levels beginning in 2002, and a 20% reduction in 2005.

Currently, 139 developing countries operate under Article 5 of the Montreal Protocol and must completely phase out MeBr consumption by January 1, 2015. The Montreal Protocol's limits do not allow developing countries to increase their production or import of MeBr. Historically, at least 56 developing countries have reported zero MeBr consumption. Another eight developing countries have consumption limits below one metric tonne (MT). Eleven of the 16 developing countries that have not ratified the Copenhagen amendments to the Protocol, and therefore not taken on obligations to control methyl bromide, have historically consumed zero methyl bromide. The remaining five developing countries that have not ratified the Copenhagen amendments have a combined consumption of under 50 MTs of methyl bromide.

In 2004, the consumption of all Article 5 developing countries was 6,312 MTs. Globally, approximately 17,393 MTs of MeBr were consumed during 2004 (U.S. consumption was 6,353 MTs). Additional information on consumption can be found in the United Nations Environment Programme's (UNEP) recent report, titled "Production and Consumption of Ozone Depleting Substances Under the Montreal Protocol: 1986-2004," which is available at: http://ozone.unep.org/Publications/Production_and_consumption2005.pdf.

Many developing countries, including Brazil, have already significantly reduced their MeBr consumption, and many are trying to accelerate their phaseouts with the goal of ending consumption before 2015. In 2005, the Executive Committee of the Multilateral Fund reached an agreement to phaseout out methyl bromide production in China and Romania faster than required under the Protocol.

(2) Watson: Please provide a statement on the Administration'sposition on H.R. 1257.

At the present time, EPA believes that enactment of H.R. 1257 is not necessary. Rather, we are committed to working through the Montreal Protocol's critical use exemption (CUE) process to ensure that those amounts of MeBr needed, and for which no technically and economically feasible alternatives exist, are available for U.S. farmers. EPA believes that the CUE process balances the need to protect public health with the need to ensure the critical needs of American farmers are met. For the 2005-2007 calendar years, the U.S. received approximately 90% of its overall CUE request, due to the technical defensibility of the annual U.S. nomination.

The United States has taken the lead in finding alternatives to MeBr, and EPA continues to give highest priority to the registration of alternatives to this chemical. U.S. positions in recent Meetings of the Parties have demonstrated the Administration's strong continued support for the Montreal Protocol, as well as our commitment to the phaseout of MeBr as technically and economically feasible alternatives become available.

STATEMENT

Of

DOW AGROSCIENCES LLC

HOUSE COMMITTEE ON GOVERNMENT REFORM

SUBCOMMITTEE ON ENERGY AND RESOURCES

Methyl Bromide: Are United States' Interests being served by the Critical Use Exemption Process?

March 1, 2006

Contact:

Brad Shurdut
Dow AgroSciences
Government and Public Affairs
Washington, DC
202-429-3434

Background and Introduction

Mr. Chairman, Dow AgroSciences appreciates the opportunity to provide testimony to the record in regard to the recent hearing entitled "Methyl Bromide: Are U.S. Interests Being Served by the Critical Use Exemption Process?" This is an extremely important topic of national and international interest, and we welcome congressional oversight of the Critical Use Exemptions (CUE) process.

Dow AgroSciences is a leading developer and supplier of agricultural chemicals and biotechnology products in the agriculture industry with experience and expertise in the pre-plant, post-harvest and structural fumigation segments. The Dow AgroSciences fumigant products (Telone® II, Telone C-17, Telone C-35, Telone EC, InLine®, Curfew®, Vikane® gas fumigant and ProFume® gas fumigant) are all currently used in a wide variety of applications as effective alternatives to methyl bromide (MB) in the majority of the uses in which CUEs are presently supported by the U.S. Government. Among the extensive and diverse mix of products registered and produced by Dow AgroSciences for agriculture are several products containing the active ingredients 1,3-dichloropropene (1,3-D) and sulfuryl fluoride (SF). These products have been used extensively in commercial settings prior to, and following the scheduled phaseout of MB. These products are currently used for pre-plant soil fumigation and post-harvest, space fumigation to protect crops, food commodities and structures from a variety of unwanted pests.

Dow AgroSciences and our parent company, The Dow Chemical Company, have been global business leaders in the soil, structural and commodity fumigation industry for over 50 years. Our company has a history of providing U.S. agriculture with important fumigant products, including MB, and today continues to support a comprehensive, global portfolio of fumigants. Since our company once manufactured and marketed MB to the agricultural and structural markets, we have direct familiarity and experience with the compound, the industry, and the agricultural commodities. In 1982, we chose to exit the MB business for a variety of reasons, including the successful development and commercialization of more modern products intended for the same purpose. Consequently, Dow AgroSciences can provide a unique perspective on the history, developments and changes that have occurred in the various fumigation market segments.

The addition of MB as an ozone depleting substance (ODS) by the Copenhagen Amendments to the Montreal Protocol was ratified by the U.S. in 1994. This act sparked the need for the development of new fumigants and use patterns. This provided an opportunity for Dow AgroSciences to take the steps necessary to meet the global needs of agriculture with an expanded development effort of existing fumigants and other technologies to fill the void that would result from the phaseout of MB. Encouraged by the leadership demonstrated by the U.S. in the phaseout of other ODSs, Dow AgroSciences invested in an intensive research program to develop new products based on 1,3-D, chloropicrin and SF to meet anticipated U.S. needs that would result from the phaseout of MB.

The U.S. initially scheduled the phaseout of MB for 2001 and this was later delayed to 2005. For developers and producers of alternatives like Dow AgroSciences, this delay of implementation and transition to alternatives also delayed the ability to generate a return on these significant investments. In addition, such a delay resulted in additional direct resources of time and money to continue repetitive research and delayed interest in and adoption of alternatives. To date, Dow AgroSciences has invested over $150 million in a concerted effort to commercialize viable alternatives to MB and to address the U.S.' stated intention of phasing out MB. This investment includes product development, production and regulatory costs. A specific focus has been placed on obtaining new federal and state product use registrations and completing the USEPA-OPP reregistration process (completed in 1993 and 1998 for SF and 1,3- D respectively). In addition, Dow AgroSciences has developed new and improved application techniques and product formulations. Dow AgroSciences has also made substantial investments towards enhancing production facilities to supply the anticipated demand for both 1,3-D and SF.

Dow AgroSciences recognizes that 1,3-D and SF products cannot serve as replacements for all the MB that is currently used and exempted from phaseout in the United States. The U.S. has made considerable progress in the reduction of MB and other ODS compounds. The support, development and refinement of MB alternatives by Dow AgroSciences and other alternative producers puts the U.S. in a good position to further reduce dependence on MB through judicious utilization of existing stocks for CUEs.

The Protocol's CUE Process

The MB CUE process is conducted with a particular focus on Decision IX/6. The objective of this decision and the guidance it provides is clear. This decision specifies that adequately justified CUEs require an objective, comprehensive evaluation of the MB use, and a determination that:

- "The specific use is critical because the lack of availability of methyl bromide for that use would result in a significant market disruption"
- "There are no technically and economically feasible alternatives or substitutes available"
- "All technically and economically feasible steps have been taken to minimize the critical use and any associated emission of methyl bromide"
- "Methyl bromide is not available in sufficient quantity and quality from existing stocks of banked or recycled methyl bromide"

Decision IX/6 provides direction not only to the Parties to the Montreal Protocol and the consumers of MB, but also to companies that are in a position to invest resources in the development of alternatives to MB. Decision IX/6 states that if the loss of the use of MB does not cause "significant market disruption" then MB will be eliminated from that use. In addition, if alternatives that meet reasonable technical and economic criteria are available, then MB would be eliminated from those uses as well.

More than $300,000,000 has been invested through a combination of Government and private industry efforts to identify and develop "technically and economically feasible alternatives" to MB in the U.S. Frankly, the results of these efforts have been largely succesful. Today, there are viable alternatives to MB available in the vast majority of uses for this product in the U.S. These same alternatives are also available on a global basis, particularly in industrialized countries that previously relied on MB for soil, structural and commodity fumigations. To ensure that the U.S. is in conformance with the specific elements and objective of the Montreal Protocol, and particularly Decision IX/6, it is critical that the U.S. CUE process:

- Utilizes all available information, at the time of allocation to minimize to the extent feasible, the continued U.S. reliance on MB. The current U.S. CUE process does not require consideration of new information that may arise following the approval of the CUE MB volumes by UNEP.
- Provides incentives for MB consumers to utilize alternatives and, in turn eliminate their reliance on MB. The volume and use of MB via the current CUE allocation process can be optimized if stakeholders to this process avoid demonstrating success with MB alternatives, or can successfully portray a lack of "feasibility" of MB alternatives.
- Provides incentives for private industry to further develop, and refine viable alternatives to MB. Inconsistent and ambiguous efficacy, economic and market impact standards are weighted towards the continued use of MB within the U.S. CUE process.
- Utilizes information presently available to the U.S. Government to require that all existing stocks of MB are utilized prior to authorizing the production of new volumes. Notwithstanding the clear requirement of Decision IX/6, the current U.S. CUE process encourages the production and importation of new MB despite the existence of available MB from existing stocks.
- Defines key terms such as "technical feasibility", "economic feasibility" and "significant market disruption". Until there are clear definitions for these terms at the domestic level, both MB consumers and the producers of MB alternatives will not understand the basis for which the U.S. has, and will make decisions on CUE allocations.

It is important to recognize that throughout the 3-year CUE process, there can be dramatic, dynamic changes in the status of MB and the potential alternatives. New technologies, product registrations, conditions of "re-registration" and the implementation of local, state or federal restrictions on either MB or alternatives can have a profound effect on the capacity of alternatives to serve as a viable replacement. It was encouraging to see the U.S. Government institute a mechanism (i.e. the 2006 "*post-hoc*" evaluation for post-plant CUEs recognizing the recent regulatory and market advances of ProFume) in the CUE process to conduct post-hoc reviews of "new information" which will lead to "real time" decisions on allocation volumes. The consideration of "new information" by the U.S. Government to determine the continued need and extent of a MB CUE allocation and corresponding volumes is critical to support continued

industry motivation to develop MB alternatives. In addition, the consideration of new information will assist in a timely phaseout rate adjustment of MB CUEs within the U.S.

Distinctions Must be Made for Pre-Plant and post-harvest MB CUEs and Alternatives

The development of MB alternatives is resource intensive and requires an enormous financial investment. In the same manner that other countries have established and presently utilize "use-specific" CUE process, the U.S. Government could successfully "endeavor" to establish a similar system. Instead, the current U.S. MB CUE process continues to avoid a "use-specific" allocation system and only differentiates "pre-plant" and "post-harvest" uses. The U.S. CUE process should accommodate separately each of the 14 Critical Use Categories as authorized by the Parties. This would be in keeping with the Montreal Protocol's "Agreed Critical Use Categories" (UNEP/OzL.Pro.Decision XVI/2 and ExII/1) which specify that "each party should endeavor to allocate the quantities of MB recommend by the Technical and Economic Assessment Panel as listed in annex II..."

A use-specific allocation system is consistent with the decision reached at Ex-MOP II and would provide petitioners for MB allocations an assurance of access to their approved MB. The CUE approach that was used within the U.S. for the 2005 control period does not guarantee that petitioners with approved CUEs would have access to MB, and it would allow MB users with the greatest ability to pay for the opportunity to garner MB away from users with approved critical needs. Additionally, as different users adopt MB alternatives on varying timelines, a "lump sum" approach would delay the transition to alternatives and would not provide the U.S. Government with any ability to keep excessive MB from uses that have successfully begun transitioning away from MB. Developers of MB alternatives need assurance that MB will eventually exit a particular use segment. Allowing an open market for MB allocation would be an economic disincentive for anyone developing alternatives, especially since alternatives tend to be more use-specific than MB.

If the U.S. Government continues to avoid a "use-specific" allocation system, it should maintain the current allocation system that differentiates "pre-plant" and "post-harvest" uses. During the past 15 years, Dow AgroSciences has successfully developed and registered a broad range of MB alternatives suitable, to an extent, for use in all of the MB CUE use categories. A summary of the available Dow AgroSciences alternatives and their usefulness are outlined in Appendix 1.

Sulfuryl Fluoride is a Currently Available and Viable Alternative that can Replace Current MB Post-Harvest Uses

With the development, registration and market adoption of sulfuryl fluoride (ProFume) within the "post-harvest" MB use category, MB CUE petitioners now have a viable alternative to which they can transition. Based on the significant regulatory advancements for ProFume in the U.S. during the past it was proper for

the U.S. Government to reduce the volume of MB within the 2006 CUE program for the post-harvest use categories. However, the 15% volume reduction does not reflect the degree of transition that has already taken place for these uses in the U.S. ProFume is now registered in all 50 states – and registrations have been obtained for each of the 2006 post-harvest critical uses of methyl bromide. The details of the current registration status of ProFume are summarized in Appendix 2 to this statement.

ProFume commercial-scale trials have been underway in the U.S. since 1998. Since that time, Dow AgroSciences, and the U.S. post-harvest fumigation industry have been working together to develop this product and to ensure its viability as a MB alternative on a sustainable, commercial basis. The registration actions represent the end of the commercial product development process, rather than the beginning.

Given the significant registration actions during the past two years, and the market success that ProFume has experienced during this same time period, the post-harvest MB use sector is positioned to make a rapid, aggresive transition to alternatives. Typically fumigation to a particular structure occurs several times annually in this use sector providing ample opportunity to learn and adapt to an alternative. Specifically, with respect to ProFume, the U.S. Government currently anticipates that only an annual 15% transition to SF with a corresponding reduction in the authorized amount of MB in the post-harvest market will occur. Furthermore the rule speculates that an additional 25% uptake of SF will occur in 2007. These standard market transition assumptions reflect what the U.S. Government anticipates occurring given experiences with standard, natural agricultural technology transitions. This standard rate of "uptake" is expected to occur at an annual rate of 15%. However, this extended transition timeline does not reflect the rate that should be required to occur for an ODS such as MB whose uses have been banned in the United States. In these circumstances, the rate of phaseout should be affected, motivated and determined by the U.S. Government to maintain compliance with the Clean Air Act, and their commitment to the Montreal Protocol (and the specific requirements of Decision IX/6). The pace of the phaseout of MB should not be left wholly up to the "market" to determine. Fortunately, more than 15% of the grain milling market has already demonstrated success using ProFume.

To assist the U.S. Government in their on-going evaluation of the post-harvest fumigation MB critical uses, Dow AgroSciences and members of the U.S. fumigation industry have provided new information and data to the U.S. for their use. Re-evaluation of ProFume to determine its suitability as an alternative to MB would permit the U.S. Government to decrease the corresponding CUE MB by more than the 15% which was adopted for 2006.

Further Transition Away from the MB Volumes in the Pre-Plant Uses is also Achievable over the Next Few Years

For the pre-plant MB critical use categories, alternatives to MB are now widely available and used. Dow AgroSciences recognizes that some critical uses and circumstances within the current MB CUE process do not currently allow for the consideration of alternatives. Furthermore, we realize that in some segments an additional period of time is needed in order for MB consumers to complete a transition. However, based on the dynamics of the marketplace, Dow AgroSciences requests that the Agency conduct frequent and on-going evaluations of the MB CUE needs for pre-plant in a manner similar to what is proposed for the post-harvest uses. Dow AgroSciences believes that alternatives are now available and better known to the user community so that a more rapid uptake away for MB could take place in 2007 and beyond. The advancement and refinement of MB alternatives have given U.S. agriculture the tools and experience needed to begin a more aggressive transition.

With the inclusion of MB as an ODS in the Montreal Protocol in the early 1990s, MB users have steadily reduced their use of MB with the utilization of alternative approaches. Since that time significant adoption of alternatives has taken place in a number of markets such as the residential-structural market which has almost completely transitioned away from MB and the California strawberry market which uses 1,3-D on a significant portion of their acres. Dow AgroSciences believes that a further transition away from the MB volumes in the preplant uses described in these comments is achievable over the next few years. Production capacity for 1,3-D currently exists to meet the anticipated increased demand.

The CUE Process: A Review of Significant Aspects

The decade-long effort by Dow AgroSciences to develop alternatives to MB has led our company to have a high level of interest in the Protocol's CUE process. While we recognize that 1,3-D and SF products cannot serve as replacements for 100% of the MB volume that is exempted from phase-out in the U.S, we believe that there is a great deal of distortion and misinformation pertaining to alternatives that has been represented in the U.S. CUE process. The result of this misinformation is that the U.S. Critical Use Nominations (CUNs) for 2006, 2007 and the recently submitted 2008 U.S. CUN do not take into account the considerable progress that has been made in the substitution of MB by alternatives, and the additional potential that these products have to replace a considerable portion of the remaining CUE MB.

It is important that the U.S. CUN process be comprehensive, objective, transparent and contain the proper incentives for U.S. growers to transition away from their reliance on MB. Moreover, as a Party to the Montreal Protocol, it is imperative that the U.S. submit CUNs that establish and maintain data quality standards that are consistent with the CUNs of the other Parties to the Montreal Protocol. In addition, it is critical that the U.S. CUN process consider objectively the information that is provided by the producers and succesful users of alternatives. Outlined below are comments with respect to the Montreal Protocol CUE process and the feasibility of Dow AgroSciences products as viable alternatives.

1. Lack of a Comprehensive Process

a.) MB CUE Petitioners

The Protocol's MB CUE process requires petitioners to describe why uses of MB are "critical" and why currently available alternatives to MB are not feasible replacements. In addition, the petitioner is required to apply for a CUE more than 2 years prior to the time when the CUE MB will be used. As presently designed, this process does not adequately motivate CUE petitioners to adopt alternatives and consider their viability objectively. By claiming an absence of viable alternatives or being overly critical of alternatives that have been introduced, petitioners can increase their likelihood of having their CUE petition approved.

b.) Lack of Inclusion of Data Submitted by Alternative Producers

The CUE process is a lengthy annual process that extends from the formal request of critical use MB by a grower, a user or an industry group through to the ultimate approval and acceptance by the Parties to the Montreal Protocol. Alternative producers have invested hundreds of millions of dollars to develop products and solutions to meet the needs of the MB phase-out but, ironically, tend to be "observers" that are not considered stakeholders in the regulatory and political process that should be supporting their efforts. Dow AgroSciences is the world's leading producer of alternatives and we have been frustrated at the lack of acceptance, and in some cases, rejection of our efforts. For example, since 2004 we have submitted detailed comments in response to the 2005 and 2006 U.S. EPA's "Notice of Proposed Rulemaking: Protection of Stratospheric Ozone: Process for Exempting Critical Uses for the Phaseout of Methyl Bromide" but it appears that the subsequent U.S. CUN for 2008 CUEs does not adequately utilize the information about the Dow AgroSciences alternatives.

c.) Insufficient Transparency of CUE Process and Lack of Clarity of Related Definitions

Requests for critical uses are submitted but the assessment and analysis that goes into the ultimate U.S. CUN is treated confidentially and done without additional comment from the petitioner, alternative producers or the public. While "stakeholder" meetings are occasionally held to update interested parties about the position and progress of the U.S. on the CUNs being debated and moved forward, the discussions are largely unidirectional and positioned to preserve MB. The CUN should be subject to public comment and review before submission to UNEP. It is also important for U.S. stakeholders to the CUE process (including MB consumers, MB producers and MB alternative producers) to have key terms defined by the U.S. Government. These key terms include "technical feasibility", "economic feasibility" and "significant market disruption". Until there are domestic definitions for these terms, stakeholders will not understand the basis for which the U.S. has, and will make decisions on CUE allocations. Furthermore, decision making for the MB Critical Use Allocation process will lack transparency without these important terms being

defined. For example, Dow AgroSciences has provided information to the U.S. Government which demonstrates that the use of ProFume as a substitute for MB in the wheat milling fumigation uses results in an approximately 9% increase in total fumigation costs for these facility operators. This 9% fumigation cost increase results in a cost increase that is less than 0.1¢ per pound of flour produced from these mills. It is difficult to believe that that a 0.1¢ increase in the price of flour, or a loaf of bread represents either "economic infeasibility" or results in "significant market disruption". However, until the U.S. Government more clearly specifies their interpretation of these terms, MB consumers in this use pattern can continue to claim – with success – that passing a 0.1¢ price increase on to their customers is untenable, and will significantly disrupt their market.

2. Use of the Best Available Information

Within the current U.S. CUE process, there are no consistent standards for data quality, and important information is often ignored. Anecdotal opinions expressed as "expert judgment" are deemed acceptable if they are brought forward by the MB CUE petitioners. Statements and requests are deemed factual by default and often put the alternative producer on the defensive within the CUE process. Regarding alternatives, negative information conveyed by the CUE petitioner is not confirmed by the U.S. government nor is additional information or clarification sought. Conversely, when new and relevant information is brought forward by the alternative producers, detailed and documented scientific data are required and the information is expected to be objective and independent. Following that, the submission of such positive information is often viewed as "biased" or "self-serving" and is often discounted.

3. Creation of Unnatural Market Influences – Disincentives for Private Industry Investment in MB Alternatives

The current CUE process creates an "either/or" choice for MB users that would not be normal under typical market conditions. In order for MB users to justify the need for a critical use, the alternatives must be determined to be economically or technically deficient. Consequently, users cannot endorse alternatives in the CUN process since it would doom or at least severely diminish the chance for a successful CUE. Therefore users will have a process induced bias against alternatives. As a producer of viable alternatives, Dow AgroSciences has experienced a number of instances in the market place in which our products were intentionally not used or not considered for trial.

Often Dow AgroSciences alternatives are measured against MB on an "uneven playing field" since MB has not gone through re-registration. Thus makes it difficult to gain adoption of the alternative by prospective customers. This approach has created a disincentive to producers of

alternatives and will continue to drive innovation and investment away from the search for MB replacements.

In both the 2007 and 2008 CUE process, the U.S. Government has created the concept of "time to transition" which provides the opportunity for U.S. agriculture to establish an *ipso-facto* MB phaseout timeline. The "time to transition" was developed in the U.S. apparently as a justification for the proposed volume and extended timeline of MB CUEs. It not clear what objective basis the U.S. Government uses to determine 1) when "time to transition" is required, and 2) in those circumstances, how much time should be permitted. Decision IX/6 states that MB CUEs are justified only if there are no economically and technically feasible alternatives. Conversely, if feasible alternatives exist – then those associated uses of MB are required to be eliminated. The "time to transition" is integrated into the effort to develop feasible alternatives, and to demonstrate their practicality on a commercial scale. Once the practicality and feasibility of the MB alternative is demonstrated and elements of the market successfully transition from MB to alternatives, the remaining "time to transition" should be rapid. Although the U.S. Government cites that standard agricultural technology transitions and "uptake" can be expected to occur at an annual rate of 15%, this slow transition rate does not reflect the rate that should occur for transitions away from ODSs such as MB whose uses have been banned in the United States.

The CUE process should be designed so as not to penalize MB petitioners from using alternatives. A system that recognizes and rewards the replacement of MB with alternatives would drive innovation and experimentation in the marketplace. The CUE process should include some incentive for MB users to try and subsequently adopt alternatives on the timeline established by the Montreal Protocol.

4. Lack of Transition Incentives

The U.S. initially scheduled the phaseout of MB for 2001 and this was later delayed to 2005. For developers and producers of alternatives like Dow AgroSciences, this delay of implementation and transition to alternatives has been costly and has also delayed the ability to generate a return on significant investments. Additional direct resources of time and money have been expended on repetitive research as a result of the delayed interest in and adoption of alternatives such as those developed by Dow AgroSciences.

Under the current process, we believe that the consumers of MB in the U.S. are encouraged to defend and sustain present uses of MB and avoid ozone-friendly alternatives. If a similar approach had been taken with DDT and chlordane, those chemicals would still be in use today. We believe it is essential that appropriate incentives are put in place which promotes the adoption of alternatives while still ensuring the continued availability of MB for critical uses. At a

minimum the U.S. government should support and endorse efforts of alternatives objectively and, where appropriate, should provide incentives to users for transition to viable MB. Without this, there is a clear signal to developers of alternatives that the return on investments in this area represents an untenable financial proposition.

Transition Timelines Must not be Compromised if Viable Alternatives Exist

With the ratification of the Copenhagen Amendment to the Montreal Protocol, the transition away from MB has been planned in the U.S. for more than 10 years. In the time period since the U.S. agreed to phase out MB, consumers of MB and the producers of alternatives have worked closely with academia and government to research, test and validate viable alternatives in the key pre-plant and post-harvest fumigation use patterns. This extensive testing and validation, much of which has occurred under commercial production conditions has clearly demonstrated both the technical and economic viability of alternatives to MB in the key use sectors. The purpose of the research and testing that was performed during the more than 10 year transition period leading up to January 1, 2005 was to prepare the consumers and the market for the phaseout and to create a product infrastructure (e.g. applicator training) to support this transition.

Neither the Montreal Protocol nor the U.S. Clean Air Act directs the U.S. CUE process to accommodate transition "time" beyond the timeline that required the phaseout of MB to be complete by 2005. If an alternative to MB is both technically and economically feasible, and its use will not result in significant market disruption, then that alternative should be prescribed for use as a substitute for MB. It is not clear why the U.S. EPA believes that a MB alternative, which has been demonstrated to be a viable alternative in specific circumstances, cannot be directed for use in those circumstances immediately.

We also recognize that the U.S. 2008 CUN is a marked reduction from the 2006 CUN that was submitted three years ago. Nevertheless, a nomination that is 25% of the 1991 historical base will result in little or no decline of MB use in the foreseeable future. Although originally scheduled for 100% phaseout in the U.S. by 2001, a 30% MB production limitation has been planned since 1993 and in place since January 1, 2003. If approved, a 25% CUN level for 2008 would represent merely a 5% reduction in the amount of MB that is used for critical uses each year during the six year period from 2003 to 2008 and, as a result, remains virtually unchanged for the three year period after it was intended to be zero.

Summary

In general, Dow AgroSciences believes that modification of the current U.S. CUE process with the refinements and additions included in these comments, will optimize the continued phase-down of MB in accordance with the Montreal Protocol and the U.S. Clean Air Act. Additionally, we believe it is essential that appropriate incentives are in place to promote the development and adoption of alternatives while still ensuring the continued availability of MB for critical uses. The CUE process should include the following:

- A mechanism that requires the use of "new information" to determine the proper CUE allocation levels of MB;
- Provision for ongoing evaluation of critical needs in light of the constantly changing and dynamic marketplace conditions for MB alternatives;
- Incentives for MB users to adopt viable alternatives in a Government-incentivized, rapid timeframe;
- Assurance that MB users with critical needs are guaranteed access to MB through a use-specific allocation system that should, at a minimum continue to distinguish between preplant and post-harvest uses; and,
- An effective tracking and reporting system that allows the Agency to determine MB usage in order to implement and control the above-mentioned key elements and to refine the MB allocation volumes for future control periods.

The reduction in MB use, more rapid than the U.S. has been supporting, is technically and economically feasible. The CUN process needs to become more transparent, include alternative manufacturers, and take into account rapidly-changing market conditions. The government can also facilitate this by acting on long-delayed registration of substitutes and re-registration of MB. Also, by clearly distinguishing between pre-harvest and post-harvest uses and evaluating alternatives for each sector, it is possible to protect those agricultural interests that are truly left without MB alternatives, while ensuring that growers, millers, and chemical manufacturers can achieve a fair return on their investments. As mentioned previously, we believe that a viable alternative, sulfuryl fluoride, is currently available for most post-harvest uses and additional, immediate reductions are justified.

Thank you, Mr. Chairman, for the opportunity to provide this testimony on behalf of Dow AgroSciences. We firmly believe that it is possible to protect both the ozone layer and our agricultural community if we maintain a realistic posture concerning the development and introduction of MB alternatives.

Appendix 1

Alternative Availability by Sector

Allocation Sector	Permitted Use Catagory	2006 US Critical Use Allowances (MB kg)	Dow AgroSciences Alternative	Are Dow AgroSciences' Alternatives Presently Used for Sector?	Technical Feasibility	Economic Feasibility
Pre-Plant Uses	Cucurbits		**1,3-D[1]**	**Yes**	**Yes**	**Yes**
	Eggplant		**1,3-D**	**Yes**	**Yes**	**Yes**
	Forest Nursery Seedlings		**1,3-D**	**Yes**	**Yes**	**Yes**
	Orchard Nursery Seedlings		**1,3-D**	**Yes**	**Yes**	**Yes**
	Strawberry Nurseries		**1,3-D**	**Yes**	**Yes**	**Yes**
	Orchard Replant		**1,3-D**	**Yes**	**Yes**	**Yes**
	Ornamentals		**1,3-D**	**Yes**	**Yes**	**Yes**
	Peppers		**1,3-D**	**Yes**	**Yes**	**Yes**
	Strawberry Fruit		**1,3-D**	**Yes**	**Yes**	**Yes**
	Tomatoes		**1,3-D**	**Yes**	**Yes**	**Yes**
	Turfgrass		**1,3-D**	**Yes**	**Yes**	**Yes**
	Peppers – field		**1,3-D**	**Yes**	**Yes**	**Yes**
	Total for Pre-Plant Uses	**6,315,237**				
Post-Harvest Uses	Food Processing		**SF[2]**	**Yes**	**Yes**	**Yes**
	Commodity Storage		**SF**	**Yes**	**Yes**	**Yes**
	Dry Cured Pork Products		**SF**	**Yes**	**Yes**	**Yes**
	Total for Post-Harvest Uses	**506,250**				

[1] – Products based on 1,3-D include Telone II, Telone C-17, Telone C-35, Telone EC, InLine and Curfew
[2] – Products based on SF include Vikane and ProFume

Appendix 2:

Federal and State Registration Status: Sulfuryl Fluoride (Tradename: ProFume® Gas Fumigant)

1. **United States Methyl Bromide Use Category: "Structures – Food Facilities"**
   a. ***Wheat Milling***: Federal Registration with USEPA in place since January 2004. State registrations approved in all 50 states. Critical regulatory restriction requiring 10:1 blending of fumigated wheat flour removed from the product label in July 2005.
   b. ***Rice Milling***: Federal Registration with USEPA in place since January 2004. All key state registrations in place including Louisiana (approved March 2004) and California (approved May 2005).
   c. ***Pet Food Facilities***: Federal Registration with USEPA in place since July 2005. State registrations accepted in 49[1] of 50 states.
   d. ***Bakeries***: Federal registration with USEPA in place since July 2005. State registrations accepted in 49[1] of 50 states.

2. **United States Methyl Bromide Use Category: "Commodities"**
   a. ***Dried Fruit***: Federal Registration with USEPA in place since January 2004. Key registration in California received May 2005.
   b. ***Pistachios***: Federal Registration with USEPA in place since January 2004. Key registration in California received May 2005.
   c. ***Walnuts***: Federal Registration with USEPA in place since January 2004. Key registration in California received May 2005.
   d. ***Dates***: Federal Registration with USEPA in place since January 2004. Key registration in California received May 2005.
   e. ***Beans***: Federal Registration with USEPA received July 2005. Key registration in California pending.

3. **United States Methyl Bromide Use Category: "Post Harvest Use (National Pest Management Association)"**
   a. ***Processed Foods***: Federal Registration with USEPA in place since July 2005. State registrations accepted in 49[1] of 50 states
   b. ***Spices and Herbs***: Federal Registration with USEPA in place since July 2005. State registrations accepted in 49[1] of 50 states
   c. ***Cocoa***: Federal Registration with USEPA in place since July 2005. State registrations accepted in 49[1] of 50 states
   d. ***Cheese Processing Facilities***: Federal Registration with USEPA in place since July 2005. State registrations accepted in 49[1] of 50 states
   e. ***Other Commodities***: Federal Registration with USEPA in place since July 2005. State registrations accepted in 49[1] of 50 states

4. **United States Methyl Bromide Use Category: "Ham"**
   a. Ham: Federal Registration with USEPA in place since July 2005. State registrations accepted in 49[1] of 50 states

[1] Registration pending in California.

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INDEPENDENT

MEMORANDUM

February 14, 2006

To: Democratic Members of the Subcommittee on Energy and Resources

Fr: Democratic Staff

Re: Hearing on Methyl Bromide

The Subcommittee on Energy and Resources will hold an oversight hearing on **Wednesday, February 15, 2006, in Room 2203 of the Rayburn House Office Building at 2:00 p.m.**, entitled "Methyl Bromide: Are U.S. Interests Being Served by the Critical Use Exemption Process?"

The purpose of this hearing is to examine the issue of continued production of methyl bromide, a powerful pesticide that depletes the stratospheric ozone layer. The ozone layer shields the Earth's surface from harmful ultraviolet radiation, which causes skin cancer and environmental damage. An international treaty, the Montreal Protocol on Substances that Deplete the Ozone Layer, phased out the production of methyl bromide in developed countries as of 2005. However, the treaty provides for an exemption for "critical uses," and the United States has used this exemption to continue to produce and use large quantities of methyl bromide, which continues to deplete the ozone layer.

I. BACKGROUND

A. Methyl Bromide Properties and Uses

Methyl bromide is a wide-ranging pesticide used to control insects, weeds, rodents, and pathogens. It is also highly toxic to humans.[1] Inhalation can cause lung injuries and neurological effects.[2]

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[1] U.S. EPA, *Methyl Bromide (Bromomethane)* (fact sheet) (online at http://www.epa.gov/ttn/atw/hlthef/methylbr.html).
[2] *Id.*

The United States is the world's largest consumer of methyl bromide (MBr). According to EPA, methyl bromide is the fourth most widely used pesticide in the United States. Of the known supply, the United States accounted for 40% of global production in 1996.[3] There are only a limited number of producing countries worldwide. Since the Montreal Protocol has been signed, only Israel, China, and United States continue to produce this ozone-depleting substance.[4]

Methyl bromide is normally applied as a liquid under pressure that vaporizes upon release at the point of application.[5] The main uses of methyl bromide are listed below[6]:

- **Soil fumigant**: Methyl bromide gas may be injected into the soil, before a crop is planted, which effectively sterilizes the soil, killing the vast majority of soil organisms. Use as a soil fumigant comprises about 80% of its use in the United States.[7] In the United States, methyl bromide is used mostly on strawberries (18% of U.S. total) and tomatoes (23% of U.S. total), consuming about 7,000 tons (14,000,000 pounds) annually. Methyl bromide is used as a soil fumigant on other crops including tobacco, peppers, grapes, and nut and vine crops.

- **Commodity treatment**: Methyl bromide gas also can be used for post harvest pest control and can be injected into a chamber or under a tarp containing commodities such as grapes, raisins, cherries, nuts, and imported materials.

- **Structural pest control treatment**: Methyl bromide gas is used to fumigate buildings for termites, warehouses and food processing facilities for insects and rodents, aircraft for rodents, and ships (and other transportation vehicles) for various pests.

- **Quarantine Uses**: USDA's Animal Plant and Health Inspection Service (APHIS) uses methyl bromide to treat imported commodities as required by quarantine regulations.

B. The Montreal Protocol and the Clean Air Act

In the 1970s, the scientific community became aware that certain widely used chemical substances were persisting in the atmosphere and gradually destroying the stratospheric ozone layer, which protects the earth from harmful ultraviolet light from the sun. In 1987, the international community completed a historic agreement to address this problem by limiting the production of substances that deplete the ozone layer. This agreement, the Montreal Protocol on Substances that Deplete the Ozone Layer, is widely viewed as the most successful environmental treaty to date. It has been signed by 187 nations, including both developed and developing countries.[8] At meetings in London

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[3] Environmental Protection Agency (Minority staff briefing slide presentation on Feb. 6, 2006).
[4] Environmental Protection Agency (Minority staff briefing slide presentation on Feb. 6, 2006).
[5] U.S. EPA, *Methyl Bromide* (factsheet) (online at http://www.epa.gov/pesticides/factsheets/chemicals/methylbromide_factsheet.htm#bkmrk).
Environmental Protection Agency (online at www.epa.gov/pesticides/factsheets/chemicals/methylbromide_factsheet.htm)
[7] U.S. EPA, *Methyl Bromide Phaseout and Critical Use Exemption (CUE): Questions and Answers* (Jan. 4, 2002).
[8] Drusilla J. Hufford and Paul Horwitz, *Fixing the Hole in the Ozone Layer: A Success in the Making*, Natural Resources and Environment (Spring 2005).

(1990), Copenhagen (1992), Vienna (1995), and Montreal (1997), amendments were adopted to speed up the phase-out of ozone-depleting substances.

On April 5, 1988, President Ronald Reagan signed the Montreal Protocol. On November 15, 1990, President George H.W. Bush signed into law the Clean Air Act Amendments of 1990, which contained implementing legislation for the Montreal Protocol.

The Montreal Protocol has succeeded in dramatically reducing the emission of ozone-depleting substances.[9] Eventually, the ozone layer is expected to repair itself, as the world continues to reduce the release of ozone-depleting substances and ozone-depleting substances already released very gradually break down in the atmosphere. In the meantime, however, thinning of the ozone layer has continued to occur each year, as demonstrated by the size of the so-called "hole" in the ozone layer over the Antarctic. To date, the largest hole occurred in 2003, with 2005 a close second.[10]

As a consequence, the incidence of melanoma, a deadly skin cancer, has been increasing rapidly in the United States.[11] EPA projects that one in 75 Americans will develop melanoma.[12] However, this problem would be much worse without the Montreal Protocol.[13] EPA projects that by 2165, if fully implemented, the Protocol will save 6.3 million U.S. lives from skin cancer.[14]

Methyl bromide was identified as an ozone-depleting substance in 1992 and is regulated globally under the Protocol, as amended in 1992 and further adjusted in 1997. The domestic implementation of the regulation is under title VI of the Clean Air Act, as amended in 1993 and in 1998. Under the current requirements of the Montreal Protocol and the Clean Air Act, production of methyl bromide was to be phased out by January 1, 2005.[15]

C. Critical Use Exemptions (CUE) and Alternatives

While the Montreal Protocol and Clean Air Act mandate the phase-out of production (and imports) of methyl bromide, they also provide a process to approve exemptions for "critical uses."[16] Critical uses must be approved by the parties to the Protocol.

The parties may deem a use critical and allow production of methyl bromide for that use only if: (1) there are no technically and economically feasible alternatives or substitutes available to the user; (2) the lack of methyl bromide would cause a significant market disruption; (3) all technically and economically feasible steps have been taken to minimize

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[9] *Id.*
[10] British Antarctic Survey, *20th Anniversary of Discovery* (online at http://www.antarctica.ac.uk/Key_Topics/The_Ozone_Hole/anniversary/).
[11] U.S. EPA, *Protection the Ozone Layer to Prevent Skin Cancer* (Sep. 4, 2003) (slide briefing).
[12] *Id.*
[13] *Id.*
[14] U.S. EPA, *Protection the Ozone Layer to Prevent Skin Cancer* (Sep. 4, 2003) (slide briefing).
[15] Montreal Protocol, Article 2H(5); CAA §(d)(6).
[16] *Id.*

use of methyl bromide; (4) methyl bromide is not available from existing stocks; and (5) there are demonstrated efforts to find alternatives.[17]

The process for approving critical use exemptions begins with the methyl bromide users, who submit applications to EPA for a given quantity of methyl bromide to be approved as a critical use. EPA then conducts a technical review of the applications with outside input, and identifies those applications that EPA believes meet the international criteria. These are consolidated into the U.S. nomination of critical uses to the Protocol parties, which is submitted by the State Department. Each country's nomination is reviewed by the Methyl Bromide Technical Options Committee (MBTOC), which is an international body of scientists, including U.S. scientists. The MBTOC provides recommendations on the nominations to the Protocol parties, who then reach a consensus to authorize or reject all or a portion of the critical use exemptions. After the United States has received its quantity of approved critical uses, EPA conducts a notice-and-comment rulemaking to allocate the approved quantity of production among users.[18]

The United States has applied for and received large critical use exemptions each year since the phase-out. In fact, the United States continues to use about 30% as much methyl bromide as it used in 1991, which is considered the baseline year.[19] The United States received 60% of the total quantity of production allowed worldwide for critical uses in each of the past two years. Moreover, it is believed that producers hold a large stockpile of methyl bromide that would be adequate to sustain its use for some period of time without any new production. While EPA knows the size of the stockpile, the number has not been made publicly available due to resistance from the producers, and the matter is currently in litigation.

Nevertheless, the critical use exemption process has been criticized by segments of the agricultural community who want to be able to use greater quantities of methyl bromide. In the past, several bills have been introduced in Congress that would allow for more production of methyl bromide in violation of the Montreal Protocol.

In the 109th Congress, California Republican George Radanovich has introduced H.R. 1257. H.R. 1257 would amend the Clean Air Act to establish critical use exemptions for methyl bromide for 2006 and 2007. For 2006, the legislation would ratify the exemptions approved by the parties to the Protocol. The legal effect of this is unclear as those exemptions have already been approved. For 2007, the bill would allow production and use of the full amount of methyl bromide submitted by the United States to the parties as a nomination for critical uses in that year, regardless of the ultimate decision of the parties to

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[17] Parties to the Montreal Protocol, *Decision IX/6. Critical-use exemptions for methyl bromide*, Decision by the Ninth Meeting of the Parties, UNEP/OzL.Pro.9/12 (Sept. 1997) (online at: http://www.unep.org/ozone/Meeting_Documents/mop/09mop/9mop-12.e.doc).

[18] U.S. EPA, *Protection the Ozone Layer to Prevent Skin Cancer* (Sep. 4, 2003) (slide briefing); *see also, e.g.*, U.S. EPA, *Protection of Stratospheric Ozone: The 2006 Critical Use Exemption from the Phaseout of Methyl Bromide*, Final Rule, 71 Fed. Reg. 5985 (Feb. 6, 2006).

[19] *See* U.S. EPA, *Protection of Stratospheric Ozone: The 2006 Critical Use Exemption from the Phaseout of Methyl Bromide*, Final Rule, 71 Fed. Reg. 5985 (Feb. 6, 2006).

disapprove a portion of that request. The legislation has 25 cosponsors and has been referred to the House Energy and Commerce Committee, Subcommittee on Energy and Air Quality. Chairman Darrell Issa is an original cosponsor.

Another important issue is the availability of alternatives to methyl bromide. EPA and USDA have engaged in extensive efforts to develop alternatives, many alternatives have been identified for specific uses, and others are currently in the process of being approved.[20]

II. WITNESSES

Panel One

- **Mr. William Wehrum**, Acting Assistant Administrator for Air and Radiation, U.S. Environmental Protection Agency

Panel Two

- **Mr. David Doniger,** Senior Attorney for the Climate Center, Natural Resources Defense Council (NRDC)
- **Mr. James Blair,** Vice President, North American Miller's Association
- **Mrs. Michelle Castellano,** Vice President, Mellano & Company (San Louis Ray, CA)

For more information, please call Richard Butcher, minority professional staff member, at 5-7084.

U.S. EPA, *Alternatives to Post Harvest Uses of Methyl Bromide* (fact sheet) (online at http://www.epa.gov/ozone/mbr/postharvest.html); U.S. EPA, *Alternatives to Pre-Plant Uses of Methyl Bromide* (fact sheet) (online at http://www.epa.gov/ozone/mbr/preplant.html).

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