

**REVIEW THE METHYL BROMIDE CRITI-
CAL USE EXEMPTION PROCESS
UNDER THE MONTREAL PROTOCOL**

HEARING

BEFORE THE

SUBCOMMITTEE ON CONSERVATION, CREDIT,
RURAL DEVELOPMENT, AND RESEARCH

OF THE

COMMITTEE ON AGRICULTURE
HOUSE OF REPRESENTATIVES

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REVIEW THE METHYL BROMIDE CRITICAL USE EXEMPTION PROCESS UNDER THE MONTREAL PROTOCOL

THURSDAY, MARCH 10, 2005

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON CONSERVATION, CREDIT,
RURAL DEVELOPMENT, AND RESEARCH,
COMMITTEE ON AGRICULTURE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:15 a.m., in room 1300 of the Longworth House Office Building, Hon. Frank D. Lucas (chairman of the subcommittee) presiding.

Members present: Representatives Moran, King, Schwarz, Goodlatte [ex officio], Holden, Cuellar, Etheridge, Butterfield, Costa, and Peterson [ex officio].

Staff present: John Goldberg, Elizabeth Parker, Ryan Weston, Claire Folbre, Tyler Wegmeyer, Callista Gingrich, clerk; Rob Larew, and Anne Simmons.

OPENING STATEMENT OF HON. FRANK D. LUCAS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

Mr. LUCAS. This hearing of the Subcommittee on Conservation, Credit, Rural Development, and Research to review the methyl bromide critical use exemption process under the Montreal Protocol is called to order.

Good morning to all of you, and I appreciate your patience. We had a unexpected journal roll call vote to attend, and more Members will be joining us shortly.

I would like to welcome everyone to this hearing to review the process under which critical use exemptions for methyl bromide with the Montreal Protocol are granted. As a part of this review, it is my hope that we will be able to differentiate how this process was designed to function when it was originally agreed upon, versus what is has become.

We are all aware that the Montreal Protocol was originally conceived, was designed to phase out the production and consumption of methyl bromide by developed nations. However, in recognition that there might be some uses after phase out, which there are not technical or economically feasible alternatives available. The parties agreed to a revision in 1997, enabling the exemptions for those uses of methyl bromide that can be regarded as critical.

In establishing the critical use exemption process, the parties to the convention agreed upon specific criteria that would be used to determine what uses would qualify as critical. As stated in decision IX/6 of the protocol, a use of methyl bromide should qualify as critical only if the nominating party determines that one, the specific use is critical because the lack of availability of methyl bromide for that use would result in a significant market disruption, and two, there are no technical or economically feasible alternatives or substitutes available to the user that are acceptable from the standpoint of environment and health, and are suitable to the crops and circumstances of the nomination. This decision is important because subsequent to this modification, the U.S. Congress enacted in 1998 to amend the Clean Air Act to conform, I should say, our domestic policy regarding methyl bromide to these new requirements and procedures articulated in the protocol.

I include this brief history to underscore the fact that by linking U.S. domestic regulation to the Montreal Protocol, the U.S. Congress has demonstrated the degree of trust that the international process would be credible and fair. Based on the reports that we have heard from recent meetings in Nairobi and Prague, it would seem that the process has, thus far, been neither credible or perhaps, not fair. Unfortunately, our friends in Europe, for some reason one can only speculate on, seem to want to stack the deck against us. Even more problematic, in a recent decision by the State Department and the Environmental Protection Agency's Office of Air and Radiation to deny American agriculture of its critical needs and forward to the Secretariat of the Montreal Protocol a critical use nomination for 2007 that falls well below our actual needs. And this is extremely troubling to me. And for starters, I am told during the review process conducted by the EPA Office of Pesticide Programs, where the necessary expertise resides, our constituents were led to believe that the 2007 nomination would be similar to the ultimate nomination in 2006. The reported difference between the expert review and the final decision needs to be discussed.

This brings me to my greater concern. That being that the critical use exemption nomination process is not a domestic regulatory action, but instead, the responsibility of our Government to advocate the true critical needs of its citizens. This process was embraced by Congress to fulfill this objective, and anything less than this from the Administration is completely unacceptable.

Now, I am disappointed that the head of the EPA's Office of Air and Radiation, Mr. Jeff Holmstead, who was responsible for EPA's part in this decision was unable to attend, and instead, sent Assistant Administrator Hazen from the Pesticide Program to defend the decision. That is no slight to Ms. Hazen, who is an excellent witness. But it is sometimes difficult to speak for others' decisions.

We all recognize the importance of methyl bromide. We also recognize that our continuing public investment in research to identify safe, effective, and economical alternatives has not been overwhelmingly successful. The absence of these alternatives makes the use of methyl bromide, as defined by the protocol, critical.

I recognize that this Nation has responsibility to live up to its international obligations. That said, this Congress also has a re-

sponsibility to ensure that compliance with Montreal Protocol does not so disadvantage our farmers as to threaten the safety and security of our food, plant, and forest resources.

With this in mind, I look forward to our discussion here today, and hope that our witnesses will be able to shed some new light that provides us with an optimistic outlook for the resolution of this issue. And finally, I would note that Dow AgroSciences and the Natural Resources Defense Council have submitted testimony for the record.

With that, I turn to the ranking member, the gentleman from Pennsylvania, Mr. Holden, for any comments he might care to offer.

OPENING STATEMENT OF HON. TIM HOLDEN, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. HOLDEN. Thank you, Mr. Chairman, for holding this hearing this morning. I am hopeful it will help us shed some light on the methyl bromide critical use exemption process under the Montreal Protocol.

We know that methyl bromide use contributes to damage of the ozone layer. The ozone layer protects both humans and ecosystems from sunlight, and its depletion may lead to a rising incidence of health problems. In recognition of the importance of protecting the ozone layer, over 160 countries joined together and signed the Montreal Protocol. This treaty controls global production and trade of ozone-depleting substances, such as methyl bromide. However, according to USDA's economic research service, the complete phase out of methyl bromide could cause substantial losses to U.S. producers and consumers of crops treated with methyl bromide, until more effective alternatives are developed and made available. Estimates for a net annual loss are in the range of \$400 to \$450 million.

While there are some approved alternatives to methyl bromide in use, and more are being researched, there are still some critical uses for which there is no good substitute. In my district in Pennsylvania, these uses include fumigating soil in strawberry fields, and keeping flour mills sanitary. For that reason, the Montreal Protocol allows us to apply for critical use exemptions. But some countries that object the critical use exemptions for methyl bromide do not have large agriculture or food processing industries. Other countries compete with the U.S. in the food and fiber arena. Accordingly, our agriculture producers are skeptical of impartial treatment under the Montreal Protocol. U.S. critical use exemption applications are ultimately determined by a handful of individuals without accountability to U.S. citizens, without transparency, and without an appeal process.

I hope this hearing will help clear up concerns about the amount of U.S. requests submitted to the international approval panel, as well as the amount of U.S. critical use exemptions approved by the panel, and I look forward to hearing from our witnesses, Mr. Chairman.

Mr. LUCAS. And I thank the ranking member for his insights.

As Members come to this hearing, I would request that they submit their opening statements for the record so that the witnesses may begin their testimony, and ensure that we have ample time for questions.

[The prepared statement of Mr. Peterson follows:]

PREPARED STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF MINNESOTA

Thank you Chairman Lucas and Ranking Member Holden for scheduling today's hearing. I appreciate the oversight you are doing on the operation of the critical use exemption for methyl bromide that was negotiated under the Montreal Protocol Treaty.

I look forward to the testimony provided by the witnesses today as well as the written testimony that will be received by the subcommittee.

I am concerned, as are many of my colleagues, that our domestic industries which must continue to rely on the use of methyl bromide have that ability. The critical use exemption that was provided for in the Montreal Protocol shows a recognition that there remain instances where methyl bromide is the only economically or technically feasible option for industries such as flour milling and commodities which need to kill pests prior to planting.

I hope that agencies represented at the hearing today will continue to carry out their sometimes dual roles of ensuring that our producers and domestic industries have the tools they need to remain viable, while also being a fair and trustworthy regulator.

Mr. LUCAS. I would like to turn to the first panel at the table.

Ms. Claudia McMurray, Assistant Secretary for the Environment, Bureau of Oceans and International Environmental and Scientific Affairs, Department of State, accompanied by Mr. Burleson Smith, Director of Pest Management Policy, U.S. Department of Agriculture, and Ms. Susan Hazen, Acting Assistant Administrator, Office of Prevention Pesticide and Toxic Substances, the Environmental Protection Agency.

Ms. McMurray, whenever you are ready, please begin.

**STATEMENT OF CLAUDIA MCMURRAY, DEPUTY ASSISTANT
SECRETARY, ENVIRONMENT, BUREAU OF OCEANS AND
INTERNATIONAL ENVIRONMENTAL AND SCIENTIFIC AF-
FAIRS, U.S. DEPARTMENT OF STATE**

Ms. MCMURRAY. Thank you, Mr. Chairman, members of the subcommittee. Thank you for this opportunity to deliver this statement on behalf of the Department of State, the Department of Agriculture, and the Environmental Protection Agency. I have a longer statement that I would like to submit for the record, with your permission.

Mr. LUCAS. So noted and ordered.

Ms. MCMURRAY. Thank you.

Mr. Chairman, we realize that methyl bromide and its phase-out under the Clean Air Act and the Montreal Protocol are issues of great importance to the members of this subcommittee, as well as your constituents. Those of us representing the United States at meetings of the parties of the Montreal Protocol are always mindful of this fact. As a consequence, our guiding principle is to balance the legitimate needs of farmers with our desire to restore and protect the ozone layer.

We know a number of things about methyl bromide. First, it is a widely used chemical that is highly effective in killing pests that

threaten agricultural crops in the United States, and indeed, all over the world.

Second, partly because the U.S. is the world's largest agricultural producer, the United States has also been the world's largest producer and consumer of this substance.

Third, methyl bromide has been in wide use in the United States and around the world for decades, and users find that efficient use of it works effectively.

Fourth, while there are alternatives available today for use in many situations, there is no alternative that can operate as effectively as methyl bromide in all the crop situations in which methyl bromide is currently used.

You will be hearing from those who use this chemical later in this hearing. They will tell you that they have made, and are continuing to make, progress in reducing the use of methyl bromide in fulfillment of our obligations under the Montreal Protocol by using newly improved substitutes and implementing innovative new technologies and practices.

The parties to the Montreal Protocol recognize that widespread use and the lack of feasible alternatives to methyl bromide have made its phase out more difficult than other chemicals controlled in the past. Accordingly, the parties created exemptions for methyl bromide, including the so-called critical use exemption, which you referred to, Mr. Chairman, in your opening statement.

The so-called essential use exemption under the Montreal Protocol is a similar one that we have used for chlorofluorocarbons and it has worked quite successfully. We obviously have more work to do to smooth out the implementation of the critical use exemption.

The protocol's criteria allow a party to seek an exemption from the phase out if it determines that the absence of methyl bromide would cause a significant market disruption. Other parties must agree that the nominating party has demonstrated that there are no technically and economically viable alternatives for the use in the context of the application, and that the applicant party continues to make efforts to limit emissions and find alternatives for the use.

Now that I have laid this general groundwork, I would like to turn to the U.S.'s 2007 critical use exemption nomination, which as you indicated, Mr. Chairman, amounts to 29 percent of our 1991 baseline level.

This nomination, like our previous nominations, was developed through a rigorous technical process involving the careful efforts of many technical experts. EPA's Office of Pesticide Programs, with collaboration from the Department of Agriculture, worked intensively with growers to understand fully the genuine critical needs in various States and agricultural sectors. This collaboration allowed expert scientific and economic staff to develop technically supported estimates for U.S. critical needs for methyl bromide in 2007, which were then shared with policymakers through an inter-agency process involving the State Department, the Department of Agriculture, the Environmental Protection Agency, the U.S. Trade Representative, and the Council on Environmental Quality.

Each year, the technical estimate has been lower than the previous year, because parts of some sectors switched to alternatives

and some sectors drop out altogether if they do not need the exemption. Over the years, we also obtain better information that allows us to more accurately estimate the true need for methyl bromide.

The value of this careful and collaborative process has been demonstrated in our consistent success thus far with the parties, who have approved substantially all of each annual CUE request submitted by the U.S. so far. Specifically, parties to the protocol approved more than 90 percent of our request for 2005, amounting to slightly over 37 percent of baseline consumption. With respect to 2006, the parties have approved the U.S. request to produce and import a total of 27 percent of the 1991 baseline consumption of methyl bromide, or about 6,900 metric tons. This represents about 73 percent of our request. In addition, the parties granted interim approval for the balance of the 2006 request, which represents just about 10 percent of the baseline amount. Final decisions on the bulk of this increment will be made at an extraordinary meeting of the parties to be held on July 1, 2005, in Montreal, with conjunction with the protocol's annual working preparatory meeting.

We understand that some Members of Congress have expressed frustration with the work of the methyl bromide technical options committee, or MBTOC, in recommending critical use exemptions. It has become clear to us, certainly over the last couple of years, that the critical use exemption process, which involves literally hundreds of individual crops and users in 17 countries, represents an unusually difficult challenge for this technical committee. With strong support from the United States and other countries, the parties took steps last November in Prague to address this challenge by adopting a decision provide clear guidance to the MBTOC in their review of critical use nominations.

The U.S. welcomes these improvements and believes these new guidelines will ensure that MBTOC reviews fully the relevant technical and economic criteria contained in the Montreal Protocol decisions, and transparently describes the basis for their judgments. The revised guidelines also allow for more extensive and direct communication between the MBTOC and the nominating party, and will provide additional time after MBTOC makes a recommendation for a party to appeal the decision.

The United States also supports the so-called multi-year approach, which would provide benefits in terms of time savings for the MBTOC and the Montreal Protocol parties in reviewing CUE nominations, as well as for the parties that have to develop them. Such an approach would provide greater predictability for the user community. Again, in November 2004, despite serious international skepticism, the parties agreed to continue considering a possible structure for a multi-year critical use exemptions. We in the U.S. remain hopeful that parties will be able to submit multiple year critical use exemptions in the near future.

Mr. Chairman, I hope that my testimony convinces you and the other members of the subcommittee that this administration has taken and will continue to take action concerning methyl bromide in a manner that not only protects public health, but also ensures the critical needs of our farmers are met.

The agreements reached on methyl bromide at the recent meetings of the parties are strong evidence of the continued vitality of the Montreal Protocol and the ability of parties to adapt to changing scientific and technical information. Although we still have more work to do, I believe that we have fostered a greater understanding and appreciation of the technical basis for the U.S. critical use exemption request.

The U.S. position at the 16th meeting of the parties demonstrated the strong continued support for the Montreal Protocol, as well as our firm commitment to phase out methyl bromide, once technically and economically feasible alternatives are available for our agriculture sector.

I thank you for this opportunity to testify before this committee on behalf of the Department of State, Department of Agriculture, and the Environmental Protection Agency. My colleagues and I would be pleased to answer any questions you may have.

Thank you, Mr. Chairman.

[The prepared statement of Ms. McMurray appears at the conclusion of the hearing.]

Mr. LUCAS. And thank you, Secretary.

In the recent meeting in Prague, 27 percent of our total critical use exemption request of 37 percent was approved. The remaining 10 percent will be subject to further negotiation at the extraordinary meeting of the parties scheduled for July 2005. In advance of this meeting, the United States has requested 29 percent of our 2007 nomination. Could you expand for me for a moment on the role that the State Department had in coordinating this U.S. request in to the Montreal Protocol? How all that came about?

Ms. MCMURRAY. Yes, I would be happy to. As I tried to explain in my testimony, we have a very time-intensive resource-intensive process that goes into preparing the submission that we make to the parties, to the Montreal Protocol now each year since the 2005 critical use exemption was submitted, and it literally doesn't stop from year to year.

I think I would like to ask Suzy Hazen, if you would permit, Mr. Chairman, to describe the technical process in preparing our numbers. But before I do that, what I will say is that the numbers come in from the growers, and they are analyzed in great detail. And you will hear about that. And then there is another review that goes on within the Government, first at EPA because they are the technical experts. And then it goes to a larger interagency group that is led, not just by the State Department, but also by the Council on Environmental Quality. And that is when we, as a policy matter, make a determination based on the technical information we have, as to what submission we will make to the Montreal Protocol parties.

Mr. LUCAS. One more question and then we will turn to Ms. Hazen for her explanation.

How will the 2007 nomination impact your strategy to win the additional 10 percent approval for this July meeting in Montreal?

Ms. MCMURRAY. Mr. Chairman, my view is that each year is independent. Obviously, we are in a slightly odd situation this year because we didn't have all of our 2006 critical use exemption acted on in November, which would be the normal course of business for

the parties. However, having said that, I think we can make a strong case for the bulk of what is still left to be determined of the 2006 nomination. And my hope would certainly be that the parties would look at that in isolation. We can make that technical case and that no other numbers, other than those 2006 numbers, are relevant.

I think you will see that the change from 2006 to 2007 that you are focused on has to do with the integration of alternatives into our strategy. In other words, EPA is starting to see the ability of certain growers to make better use of the alternatives that have now come onto the market.

So we are going to aggressively pursue the balance of our 2006 request and we think, aside from perhaps a percentage point which we think new information has indicated may not be viable any longer, that the bulk of that 10 percent we can make a very strong case for.

Thank you.

Mr. LUCAS. Ms. Hazen.

Ms. HAZEN. Mr. Chairman, thank you for the opportunity to explain our process and hopefully provide some answers to the questions which this subcommittee has.

What I would like to do is walk through the process that is used to come up with the U.S. proposal.

In 2006, users requested approximately 60 percent of the 1991 baseline, or approximately 50 million tons. In 2007, the users requested 15 million tons, or 59 percent of the baseline. These requests come into the Federal Government, they come into EPA. We work with USDA and others, and they go through a very rigorous technical review process that has been reviewed and approved through an interagency collaboration.

The process itself has been refined over the years as we have developed better and more precise information sources. Specifically—and this may help to answer some of the questions—included in this technical review process, for each sector we consider things like key pests, yield and quality loss when alternatives are used, cost impacts of alternatives, and transition time. So if you think of the data coming in the door to EPA and others, the first thing we do is make initial adjustments to the amounts that are requested. So for example, we go through to assure that there is no double counting. You can, for example, have a large company come in and ask on their own independently for a request, and then an association also requesting. And there is usually double counting there. So we look at that. We look at growth. We look at use rate adjustments. And one of the larger areas where we are seeing—I won't call it double counting, but in quarantine and pre-shipments, there is a separate pot, if you will, that can be drawn from that does not have to come in through the critical use exemption. So the first thing we do is look at those four things.

To put that in perspective, for the 2007 request, approximately 17 percent of the modifications or adjustments that were made initially were based on those four criteria. I am not trying to single out any particular industry, but for the strawberry nursery group, approximately 90 percent of the adjustment that was made, was

made because 90 percent of the requests qualified for QPS, or quarantine pre-shipment.

After these basic adjustments have been made, a number of additional factors are considered. We look at key pest distribution, substitutes, regulatory impacts, for example, is methyl bromide not allowed to be used somewhere, are there caps, those kinds of things, unsuitable terrain, a whole series of other issues which we look at. In going through the 2007 requests, this resulted in adjustments to the modified requests after the initial adjustments of approximately 47 percent.

The process that we are using I think has resulted in better, more accurate information. The user community is providing us with much better information. We are working with that group, with those groups to help them better refine the distinctions between the sources of methyl bromide, and we think that we have come to a place where more refinements are probably necessary, but we think we are getting to a good place.

So that is an explanation of how the process works to come up with a final number, Mr. Chairman.

Mr. LUCAS. Thank you, Ms. Hazen.

My time is now expired and I now turn to the ranking member, Mr. Holden, for his questions.

Mr. HOLDEN. Thank you, Mr. Chairman.

Ms. McMurray, you shared a concern that will be expressed by the industry folks that the European Union is simply asking that the U.S. requests be cut, even if the U.S. applications may be able to justify the use at the levels requested?

Ms. MCMURRAY. Congressman, I think we have had a significant challenge. This is, as I indicated before, a new process for everyone. It is complicated. The situation is different in the United States than it is in many European countries, as far as climate, soil, geography, you name it. We have had a challenge in communicating that to a lot of the other parties, but the Europeans, I think, have probably been the ones that we have had our most significant differences with. I do think, though, that now that we have made the technical case 2 years in a row to the advisors to the parties, that they are starting to see that this is not something that we are submitting lightly, that this is a credible application that is backed up by numbers, that is backed up by circumstances, and that we are seriously moving in the direction of integrating alternatives into the process, but that that will take a little bit longer than everyone would like.

I think your question goes to—

Mr. HOLDEN. Their motive, yes.

Ms. MCMURRAY. Well, your question seems to go to whether they have some arbitrary number in their mind that they want us to get to, and if I were to answer that directly, I would say yes. It is zero. We all want to get to zero. But now that we have gone through this process, I think we have convinced them that it has to take a little bit longer than what they envision.

Mr. HOLDEN. Thank you.

Mr. Smith, in my opening statement I mentioned applications in my district for methyl bromide for strawberry fields and in flour mills for sanitary reasons. Has research showed any alternatives so

we can get to a lower number? Because what I am hearing from our folks is that we are not there with an alternative to methyl bromide in these two applications.

Mr. SMITH. Representative Holden, thank you for the question.

Yes, the U.S. Department of Agriculture has conducted research on alternatives for a number of different crops that are covered under the critical use exemption process. With respect to each individual case, such as strawberries that might exist in your district, I can't speak to those specifics. However, there are labeled alternatives for many uses. One of the issues, however, is that they have to meet both a biological and a regulatory requirement, and if that is not registered in a specific State, then that alternative may not be available to growers.

With respect to the question on post-harvest, in flour mills, for instance, there are products that have been registered recently that cover many of the pests that are found. But if they do not cover all of the pests that exist in a facility, then there may be questions as to whether or not an alternative will be fully a replacement for methyl bromide.

Mr. HOLDEN. Thank you. And I believe this question probably is for you, Mr. Smith, as well, or maybe Ms. Hazen.

Did the Golf Course Superintendents Association of American submit an application for 2007 under the critical use exemption process? Or Secretary?

Ms. HAZEN. Perhaps Mr. Smith and I can share this question.

My understanding is that the Golf Course Superintendents did not submit a critical use exemption request.

Mr. HOLDEN. They did not? That is contrary information.

Ms. HAZEN. They submitted one, but withdrew it. I am sorry.

Mr. HOLDEN. Were they asked to withdraw it?

Mr. SMITH. Allow me to answer that question, sir.

Mr. HOLDEN. Yes.

Mr. SMITH. They were not asked to withdraw it; however, I did contact the Golf Course Superintendents Association, and during my discussions with them, made it very clear that I was not providing legal advice, as I am not an attorney. However, there were concerns conveyed to them over whether or not their nomination met some of the criteria of the critical use exemption process. And for that reason and because of the timeliness associated with submitting the nomination, I explained that there would be options for them to withdraw the nomination without prejudice. But that was something that they should contact EPA for clarification of the specifics of the nomination and what criteria might exist with regard to whether or not to submit—or maintain the nomination or not.

Mr. HOLDEN. Well, wouldn't that be contrary to their interest to withdraw it? I assume that Mexico and the Caribbean countries would be allowed—because they are developing would be allowed to use methyl bromide, and therefore, they would be at an advantage.

So they were not pressured to withdraw their application even though they realized that developing countries would be able to use methyl bromide and it might not in their best interest?

Mr. SMITH. One of the issues that was discussed, sir, was the fact that unlike commodities that can be traded across borders, that the

use on golf courses would be considered to be different than those uses, or it could be, at least.

Mr. HOLDEN. Sort of like a luxury, as opposed to other crops? My question is if it is a luxury in the United States, isn't it a luxury in Mexico or in the Caribbean?

Ms. MCMURRAY. I think I will take a stab at this as well.

First of all, in reference to your question about withdrawing the application that they made, I think what had been asked of them was to look at the criteria that the protocol provides, and see if there might be more that could be done to make a good case that those criteria were met. Because a review of it by the technical experts indicated that there was weakness in that case, and EPA has indicated that they would work with them. And in my statement, I tried to describe the timing of the process of all these exemptions, but we didn't really talk about the fact that there are other opportunities. There is a supplemental process. There is time between now and the meeting when adjustments can be made, so if, indeed, they are able to come back and make a stronger case that they have met the criteria, we would certainly take a look at that before we would make additional submissions to the international body.

Mr. HOLDEN. Thank you.

Mr. LUCAS. Chair thanks the Ranking Member, and turns to the gentleman from Michigan.

Mr. SCHWARZ. Thank you, Mr. Chairman.

A couple of questions, if I may.

In reading the background material supplied by Secretary McMurray, there is mention of some other compounds that might be alternatives to methyl bromide. They are all halogenated compounds. What is the difference between one halogenated compound and another halogenated compound? If you using one chlorofluorocarbon, why is it better to use another one? Why is the chloride compound—I believe it was a chloride compound—better than using methyl bromide? Actually, it was chloromethane I think you mentioned in the paper.

Ms. MCMURRAY. Chloromethane. Congressman, if you would permit me, I wonder if I could ask Ms. Hazen, whose office is responsible for approving these alternatives, to give you a more detailed answer.

Ms. HAZEN. There are quite a few alternatives that have either been registered or are actually currently under consideration for registration. And as EPA looks at methyl bromide alternatives, which are given the highest priority in our registration process, we go through and determine the significance of the impacts across the board, not only on human health, but also on the environment. And those that have been registered and those which are currently pending to be registered are looked at with an eye towards whether or not they can be effective and used in amounts and volumes that will not have an undue impact on the environment.

So we look at that. I can not answer your question specifically in terms of the technical relative relationship between the two, but I would be happy to take that question back for the record and get you a more precise technical written answer.

Mr. SCHWARZ. To make it very simple, why is one halogen-containing compound, in this case a chlorinated compound, better than

a brominated compound? Or why would a fluorinated compound be better than a brominated compound—take all the halogenated compounds?

Ms. HAZEN. We would be happy to take that back for the record and get you a precise written answer.

Mr. SCHWARZ. OK, thank you.

Another question. How compliant are countries in the EU for the Montreal Protocol?

Ms. MCMURRAY. I will take a stab at that one.

I think generally to compare numbers, we would have to look critical use exemption requests versus what the U.S. submits. And we have some difficulty in obtaining the information for individual member States for the European Union, because they submit their information as a whole. We are able to divine some specific information that deals with countries that are similar to ours, such as Italy or Spain, as far as the same crops and the same climate.

As far as their compliance, I would say generally we have not received any evidence that they are out of compliance, but if there is a specific question you have on some specific element of the protocol, we would be happy to try and answer that for the record for you.

Mr. SCHWARZ. Yes, the point being are our horticulturists and nursery owners and green operations getting hammered because of the Montreal Protocol and because of the fact they are scrambling to find an alternative to methyl bromide, whereas everybody else is getting a pass?

Ms. MCMURRAY. I think I pointed out earlier that there are differences that are country specific, that are even regional differences between the United States, and since you mentioned Europe, European countries. There are some countries that just don't have the same climate or pest pressures that we have here in the United States, and so it is easier for them to get off of methyl bromide.

Mr. SCHWARZ. Or stay on.

Ms. MCMURRAY. Or stay on. But each country's application is reviewed under the same technical criteria of economic and technical feasibility. So we are giving just as hard an eye to their applications as they are to ours when they come into the international arena.

Mr. SCHWARZ. Thank you, ma'am. Thank you, Mr. Chairman.

Mr. LUCAS. You are welcome. The gentleman from North Carolina, Mr. Etheridge.

Mr. ETHERIDGE. Thank you, Mr. Chairman, and let me thank you for holding this hearing so we can shed more intense light on this, I think, very important issue. And we say we all are concerned about protecting our environment, including the critical ozone layer, the Earth's atmosphere, because it is important to all of us. And that is why the United States is a party to the Montreal Protocol.

Nevertheless, the farmers of North Carolina have a very keen interest in the treatment of methyl bromide under the protocol, because they use it to treat soils for nursery crops and tobacco, the two top crops in our State. And we produce a lot of sweet potatoes in my district as well, and as you can appreciate, that is used there, too.

So Ms. McMurray, let me ask this question. Your testimony, as I read it, ignores a big complaint we have been hearing and will hear from the next panel that will follow you, and that is transparency of the CUE's process. You mentioned the adoption of Decision 16-4. Does the decision provide guidance to the MBTOC regarding improving transparency, or will industry observers continue to be kicked out of meetings and prevented from simply listening to how MBTOC's recommendations are being made?

And on a related note, you said the decision will provide time for MBTOC's recommendation for a Protocol party to appeal. My question is, appeal to whom, and how will that work exactly?

Ms. MCMURRAY. You have asked several questions there. I will try to—

Mr. ETHERIDGE. I did that so I could save my time. Thank you.

Ms. MCMURRAY. I will try to pull them apart one by one.

We worked very hard for several months to find a process that all of the parties could agree to, but that was satisfactory from our standpoint, as far as bringing more transparency and fairness to the technical review process. Because indeed, everyone has pointed out here this morning when we started, this was complicated, this was new. The technical reviewers had more factors than they had ever looked at before with other chemicals, and it was clear that they were having a hard time with it, and that we weren't getting a satisfactory review.

So this decision that was taken back in November tried to get at the concerns that you just articulated. The biggest thing for us, I think, was when we get a decision back—or not a decision, but a recommendation back from the technical committee, we need to be able to look at it and understand why they came to the decision they did. Certainly in 2005 and even in this past year, we have looked at it and haven't been able to discern what the basis for the conclusions were, and we have had to spend a lot of time back and forth trying to get to that answer, and most times when we do get to the answer, we realize that they have misunderstood our data or they have misunderstood our application or our economic approach or whatever.

So the biggest thing I think we have asked them to, and we will see in this next round how well they do it, is to document precisely what studies they are basing their findings on, what other conclusions they have made, and how they got to those.

I think also I mentioned the direct communication between the parties and the technical reviewers. That is really, really important. It shouldn't be a mystery novel or a giant black box. We should be able to have direct conversations, and this decision calls for that.

Also, something that was quite important to us in the United States, which I mentioned earlier, which is we have a lot of very specific circumstances in your State and in others that don't exist in other parts of the world. And they are reasons why we still need to use methyl bromide. We need to have those specific circumstances looked at by the technical reviewers. We can't just have them adopt some kind of a one-size-fits-all approach that really disadvantages the United States.

And then finally, you asked about appeals. We haven't tried this process out yet, so I don't know that I have a lot of specifics to offer you at this point. But there is an opportunity for an appeal if a MBTOC recommendation comes back that we are unhappy with. We haven't, as I say, had the opportunity to use this yet. It would go back to the same technical reviewers, and obviously, we could go to the parties if we still weren't satisfied with the response we got after that. But as far as my being able to tell you how well this works, I can't yet, because we haven't—and hopefully we won't have to take advantage of it. But I can certainly report back to you if we do use it in the near future.

Mr. ETHERIDGE. Mr. Chairman, I have some follow-ups, but I see my time is up. I hope you will keep us apprised of that and follow up. I think that is one of the critical pieces that we are talking about today.

Thank you. I yield back.

Mr. MORAN [presiding.] I think this question is directed at Mr. Smith, but I would be happy to have anyone respond.

Mr. Smith, to the extent that there is a stockpile of methyl bromide, does it maintain some semblance of price control over this product? And as we begin to bleed off the supply, I assume it is likely that prices will rise to the point where the product may not be affordable to those who are purchasing it. Is there a plan, a thought given to the consequences of this?

Mr. SMITH. Representative Moran, although USDA has not conducted a formal study with regard to pricing under the critical use exemption system, we have considered, in our role to advisors to EPA and to the Department of State, likely impacts on the market for methyl bromide, and the effect on commodities grown or processed with the aid of methyl bromide.

On the supply side, there are actually three sources for methyl bromide under the scheme that has been set up under the Environmental Protection Agency's allocation rule. They include a domestic manufacturer, imports, and then also sourcing material from existing material, and I believe what you used the term "stocks."

The ability for a user of methyl bromide to source their critical use exemption from any of the three means that there will be a level of competition, not dissimilar to that which has existed previously. And so in discussions with the economists at USDA, we do not anticipate that the market supply and demand will be dramatically different in 2005 than previously. And therefore, should not have significant impact on pricing.

Mr. MORAN. Which I believe answers my follow up question, which does USDA have an estimate of the cost that the agreement to use existing stocks for critical uses will impose on methyl bromide users? The answer that you have just given that USDA's position would be that the cost would not be changed?

Mr. SMITH. Again, at this point, the market will fluctuate year to year, and so for that reason it is difficult to establish what is a result of just annual differences in the market and what might be a direct effect of any type of regulatory scheme.

Mr. MORAN. Thank you very much.

The gentleman from Texas.

Mr. CUELLAR. Thank you, Mr. Chairman.

I guess to either of you, since the 1985 U.N. Vienna convention on protection of the ozone layer, what are the three major studies dealing with scientific findings on both sides of the argument? I mean, if you would have to name them, what would you name?

Ms. MCMURRAY. If I could ask you to clarify your question. Are you focused on methyl bromide or are you—

Mr. CUELLAR. Oh, I am sorry. Yes, I apologize. Yes, on the MB, yes.

Ms. MCMURRAY. I might have to take that one back for the record. I am not sure I could cite specific studies. If you are referring to its potential to deplete the ozone layer, perhaps, there are studies to that effect which we could certainly provide you for the record.

Mr. CUELLAR. OK. Do you mind, and if you have anything on both sides of the issue?

Ms. MCMURRAY. We would be happy to provide you.

Mr. CUELLAR. And I don't want a laundry list, just what you all might consider the top three studies on that.

Ms. MCMURRAY. OK. I would be happy to provide you that for the record.

Mr. CUELLAR. Thank you, ma'am.

Mr. LUCAS [PRESIDING.]. Seeing no further questions, the Chair would like to thank the members of this panel for their testimony today. It has been extremely helpful for us to get a better understanding about the process and factors that influence the development of the 2007 critical use nomination.

In particular, I am relieved to hear that there was consideration given to the question of how the 2007 nomination would impact the ongoing negotiations for our 2006 nomination. That said, I am still concerned with our experiences thus far with the methyl bromide technical options committee. The fact that certain changes were agreed upon in Prague, while useful but not necessary, put our minds at ease that our friends in the international community will abide by these changes and limit their review to the biological and chemical sciences as opposed to the political sciences, so to speak.

While I am grateful that we have such a strong group of negotiators working on this issue, you should know that this subcommittee will continue to watch this issue very closely to ensure that our constituents are well represented.

And with that, thank you, Madam Secretary, for your time and your insights today.

Ms. MCMURRAY. Thank you, Mr. Chairman.

Mr. LUCAS. And we call upon our second panel to come to the table when they are ready. We would like to invite our second panel to the table. Ms. Rebeckah T. Freeman, director, government relations, American Farm Bureau Federation, Washington, DC; Mr. James A. Bair, vice president, North American Millers' Association, Washington, DC; Mr. Daniel Botts, director, environmental and pest management division, Florida Fruit and Vegetable Association, and on behalf, of course, of the Crop Protection Coalition; and Ms. Michelle Castellano, attorney and vice president of the Mellano and Company, San Luis Rey, CA, on behalf of the Society of American Florists, the American Nursery and Landscape Association, the Florida Nursery, Growers and Landscape Association, and the

California Cut Flower Commission. You have quite a group to represent. And Mr. Rodger Wasson, president of the California Strawberry Commission, Watsonville, California; and Mr. William Carey, School of Forestry and Wildlife Sciences, Auburn University, Auburn, AL.

Ms. Freeman, when you are ready.

STATEMENT OF REBECKAH FREEMAN, DIRECTOR, CONGRESSIONAL AND REGULATORY RELATIONS, AMERICAN FARM BUREAU FEDERATION

Ms. FREEMAN. Good morning, Chairman Lucas, Mr. Holden, and members of this subcommittee.

My name is Rebeckah Freeman, and I am the director of congressional and regulatory relations for pesticides, crop protection, and air quality issues for the American Farm Bureau. On behalf of our membership, I want to thank you for your interest and the opportunity to address the subcommittee regarding our alarm and disappointment on the critical use exemption process under the Montreal Protocol.

I would like to submit my full written testimony for the record, and I am going to try to abbreviate it a bit, and I will talk until my 5 minutes is up or until my voice runs out.

Mr. LUCAS. Perfect. Seeing no objections, so ordered.

Thank you.

Ms. FREEMAN. Noncritical use of methyl bromide in the United States was completely phased out in the beginning of this year in compliance with the Montreal Protocol. Where economically and technically feasible alternatives exist, agriculture users have met their phase out schedule and have stopped using fumigant. But despite significant ongoing efforts to find alternatives, methyl bromide remains an indispensable pest control tool for important uses in crop production, grain storage, food processing, and general pest management.

I hope to make three points today.

First, the secure and continued adequate availability of methyl bromide for domestic users through the CUE process is economically essential, scientifically defensible, and legally justified.

Second, that the Montreal Protocol CUE review process is broken, and the United States should work actively to repair the system.

And lastly, in light of international reluctance to honor the terms of the protocol, Congress should work to assure that U.S. agricultural users have fair access to the methyl bromide they need.

For many Farm Bureau members, the use of methyl bromide as a pre-plant treatment is essential, for example, in production of strawberries, tomatoes, grapes, almonds, walnuts, peppers, eggplants, cut flowers, and numerous other products. To gain an economic perspective, a recent study found that a complete ban on farm uses of methyl bromide for annual fruit and vegetable crops alone in California and Florida would result in an estimated loss of about \$200 million a year annually, or about 20 to 30 percent of their estimated revenues from the treated commodities in each State.

Pre-plant treatment of methyl bromide controls soil-born pathogens and pests that reduce the vigor of newly planted crops. Methyl bromide improves yields because the need to hand-weed and cultivate soil is reduced, meaning more efficient irrigation is possible. Better yields mean better margins, and better margins mean more financial stability. Poor yields mean less stability, and less stability puts some producers at the risk of not getting next year's planting loans. For those without feasible alternatives, methyl bromide continues to be the only consistently effective and economical treatment that can be applied within a flexible time frame without harm to the food product, or in some circumstances, other natural resources. With rare exception, it works every time, all the time.

However, the reality is that feasible alternatives do not exist and are not expected soon for a significant number of the agriculture users currently requesting CUEs. Despite claims to the contrary, there simply is no one-size-fits-all replacement, or combination of replacements that works as effectively, as consistently, and as affordably as methyl bromide.

At previous oversight hearings, Congress has voiced their concerns over this issue, but unfortunately, those concerns have not resonated within the international community, and the Montreal Protocol grows steadily worse.

The terms of the protocol clearly intend for the CUE process to provide use to any user's critical documented need for methyl bromide. Our users have committed a lot of resources to get good information to EPA. EPA has sorted through that information, and the State Department has argued very hard at the international level to get American producers what they need. Unfortunately, this tremendous combined effort has born little, if any, proverbial fruit. U.S. producer must have approved CUEs to prepare for each planting season, and our delegation has effectively been forced to continue to accept objectionable terms with very little hope of meaningful recourse or remedy.

Farm Bureau strongly believes that the CUE approval process should be based on the real sometimes fluctuating need, and not subject to re-negotiation based on political needs. The international community has graphically demonstrated that the international process is not objective, not transparent, and not science-based. We are no longer playing by the rules we signed up for. Participants like Farm Bureau have not been allowed to observe technical debates among the parties regarding our own domestic needs, and were it not for the cooperation and diligence of the U.S. delegation to keep us informed, we would pretty much find out what our producers got after the fact. We have seen and experienced enough of the protocol process to be convinced that it is currently broken and it can not be relied upon to fairly evaluate the legitimate methyl bromide needs of the American producer.

The protocol is no longer about ozone protection. Rather, the rules have been changed to suit the political agendas, gain economic advantage, and these new rules have nothing to do with environmental protection, and everything to do with putting American producers and consumers at risk.

The United States Government signed the protocol in good faith. Congress ratified its terms into law. Our country has drastically re-

duced the use of ozone-depleting substances, and domestic users of methyl bromide have unequivocally justified their critical use needs to international users. We are holding up our end of the bargain. We have every right to expect the parties to do the same.

And we have some suggestions about where Congress may want to go relating to this issue, and I am going to let those be included in my written testimony.

Thank you, and I am happy to answer any questions.

[The prepared statement of Ms. Freeman appears at the conclusion of the hearing.]

Mr. LUCAS. Thank you.

Mr. Bair.

**STATEMENT OF JAMES A. BAIR, VICE PRESIDENT, NORTH
AMERICAN MILLERS' ASSOCIATION**

Mr. BAIR. Thank you, Chairman Lucas, Mr. Holden, and members of the subcommittee.

I am Jim Bair. I am vice president of the North American Millers' Association. We represent 48 companies that operate 170 wheat, corn, and oat mills in 38 States. In fact, there is a mill in every State represented on the subcommittee and in just about every one of your districts. Those companies produce about 160 million pounds of product every day, which is a little more than 95 percent of the total industry capacity.

I will be brief. I realize that this topic is one that is new for many of you, and you have heard a lot already, and you have got a lot of written testimony, and after a while it can make your head hurt. Allow me to put it into context what all this controversy is about. I just want to cite from a couple of locations on the second to last page of my written testimony, and those are direct quotes from the EPA web site.

And the first one is this. To your point, Mr. Holden, about the success of the treaties so far, the first point is—and again, I am quoting directly from the EPA web site.

Anthropogenic or man-made, methyl bromide has contributed a total of about 4 percent to ozone depletion over the last 20 years, and of this, 2½ percent can be contributed to agricultural fumigation activities.

So 2½ percent of 4 percent. And the next point which I think is really key, it says—and you have heard about the MBTOC already

the MBTOC recommendations to approve 35 percent of the U.S. critical use nomination represents 0.4 percent of the ozone-depleting substances—of all the ozone-depleting substances from all the countries that were parties to the treaty when it was first negotiated.

Or to turn that statement around, if you took the U.S.'s critical use nomination representing all of the interests here and many more, that quantity represents 0.4 percent of all the ozone-depleting substances from all the countries when this treaty was first signed. That is a number that is, in absolute terms, is inconsequential and as a comparison, relative to the benefits of food and agriculture is a number that is so small as to approach zero, particularly when you consider the tremendous benefits that it brings to food and agriculture.

I also wanted to comment quickly about the CUE process. I think that the parties to the protocol have an unhealthy obsession with

secrecy and undemocratic decision making. Mr. Etheridge asked about that earlier. If this subcommittee behaved like a Montreal Protocol body, everybody at this table and everybody sitting behind us would have to leave the room when the substantive discussions started taking place. I and everybody at this table, have personally been kicked out of these Montreal Protocol meetings. And these were meetings that were held in huge auditoriums and we sat in the back row. And it wasn't our intention to even say anything, we just wanted to sit there and observe and hear what the negotiations were, hear the points. And when we were noticed sitting in the back of the room, we were told that we had to leave. That doesn't represent any sort of good policy making as we know it here in the United States, certainly.

Ultimately, the fate of our critical use exemption applications are determined by a handful of people behind closed doors, and those people are unaccountable to U.S. taxpayers. And what is worse, in my view, is that the U.S. funds about 25 percent of the Montreal Protocol activities. Over the last 3 years, that total amount was \$573 million, so our share of that would be \$190 million or so.

Mr. Schwarz asked about other countries and how they have been able to get rid of methyl bromide. I spoke at an industry conference once that had hundreds of people from around the world, and I was describing the efforts in Washington to save methyl bromide for critical uses in agriculture and food production. And there was a delegate there from Norway, and he stood up in the front row and started berating me that the United States was not as committed to saving the environment, and on and on and on, and frankly, got quite personal to the point where I finally said banning methyl bromide in an agricultural powerhouse like Norway must have required a huge commitment and I congratulated him on that.

I want to talk about what I consider to be arbitrary cuts in our CUE. In multiple hearings in front of the Committee on Agriculture, as well as other congressional committees, you have heard about this. Let me just say that well in advance of the Montreal Protocol, my industry had voluntarily reduced its usage. The EPA label allows for this compound to be used in our facilities at up to 6 pounds per 1,000 cubic feet. Unlike some of the other that you will hear from, we don't treat soil. We are just treating the insides of grain mills. And we do so because keeping food produced in a sanitary setting is something that the Government demands and consumers reasonably expect. We have cut our methyl usage down. We are not using it at the EPA approved label rate of 6 pounds; we use it about 1¼ pound.

Further, when we have submitted our CUE applications, each year we have voluntarily cut that number further down, and then it goes to EPA and they cut that number again, and then it goes to the United Nations Montreal Protocol, and they cut that number. And after a while, people are starting to say "Well, gee, as sort of an opening poker play, why don't we ask for more than what we need so that when all the cuts are made, we will have an amount that is nearer or more close to what we really need." We haven't done that. We have tried to play the game according to the rules as we understand them, and we have tried to be good guys, and do the responsible thing. But you get penalized for doing the right

thing because you put in a legitimate number as best as you can calculate it, and that number just gets cut further and further at every step in the process.

I wanted to make one more quick comment, and then I will close, Mr. Chairman. I did want to say that in reference to some of the earlier conversation about alternatives. This compound is different, or our use of the compound is different than, for example, CFCs as I think one of the members of the subcommittee referenced. In refrigeration and uses of chlorofluorinated compounds, that is an engineering problem. And smart engineers can figure out how these substances work inside a refrigeration compressor. And the physics of that doesn't change from year to year. Our use of this compound is a biological problem. Insects change from year to year. Weather changes all the time. My colleagues who do use it as a soil fumigant, they have different soil types. So it is an apples to oranges comparison to say that just because the problem associated with chlorofluorinated compounds was solved that we can do the same thing for methyl bromide. That is not true. Also I would object to the notion that the critical use exemptions are merely a glide path which was intended to get us to zero beyond the phase out date. There is nothing in the treaty that talks about it. The treaty that Congress ratified, says "At the end of the phase out period, there will be critical use exemptions available for those industries which can demonstrate a need." It doesn't say they will be available to them only for a certain amount of time and in declining amounts, at the end of which period of time they will also be at zero. That is not the treaty that we signed on to.

Thank you very much.

[The prepared statement of Mr. Bair appears at the conclusion of the hearing.]

Mr. LUCAS. Thank you, Mr. Bair.

Before we proceed to the next witness, that sound you heard outside probably was Angus, the Agriculture Committee's official dog. I would say he probably ran across one of the judges from the most recent Cotton WTO case.

We now turn to Mr. Botts.

STATEMENT OF DANIEL A. BOTTS, DIRECTOR, ENVIRONMENTAL AND PEST MANAGEMENT DIVISION, FLORIDA FRUIT AND VEGETABLE ASSOCIATION, MAITLAND, FL, ON BEHALF OF THE CROP PROTECTION COALITION

Mr. BOTTS. Thank you, Mr. Chairman, and members of the committee.

My name is Daniel Botts. I am the environmental and pest management director, Florida Fruit and Vegetable Association, speaking both for that association today, and on behalf of the Crop Protection Coalition, which is a coalition that was created of industries that depended on methyl bromide in crop production storage and marketing of products back in 1993.

As Florida Fruit and Vegetable Association, though, I would like to focus my comments today specifically on the topic of CUE petitions and the international review of those petitions. Florida Fruit and Vegetable Association has been actively engaged in research programs to look for alternatives since 1991, when the initial peti-

tion for listing methyl bromide as an ozone-depleting substance was put forward to the Federal Government. That was prior to any Montreal Protocol action, or prior to even the rule that was established under the Clean Air Act in 1993. We did this for one important reason. When this petition was filed, it pointed out to us that we could not be dependent on a crop production tool as a foundation of our production practices that is a single compound. We had to have alternatives.

I would like to report this morning that we have alternatives coming out of the woodwork and are able to produce crops in plastic molds culture in Florida at the same level of production efficiency, at this point, that we do in methyl bromide. Unfortunately, that is not the case. Because of that situation and because of the process that was put into place at the international level, called the critical use exemption process, under a set of criteria that was established by the parties to the Montreal Protocol and the process for which input was developed through a public process, similar to rule making in this country, we have attempted to comply to every step of the way with the criteria and concerns in the critical use exemption process.

The initial petition that we submitted in 2002 for four commodities, it was actually three petitions because we did tomatoes as a single petition, strawberries as a single petition, and then included in non-solinitious crops peppers and eggplants in a single petition. Comprised over 5,000 pages, not only of the narrative associated with our description of why we needed the critical use exemption for those commodities, but also the supporting research documentation associated with that effort to try to find alternatives.

That was followed in 2003 by a subsequent petition that was consolidated, which represented over 3,000 pages of which a little over 500 pages are in the docket associated with the CUN process. And then the latest round, an additional 1,800 pages were submitted to meet the criteria as we understood it from the international level. One of the most frustrating parts of this process is the fact that those criteria change. And most of the time, those changes take place after our petitions have been filed. In fact, the process that Secretary McMurray alluded to in looking forward is fine. But we are subject right now to a process that has been in place that was developed and put forward historically. And quite frankly, we don't think it works, primarily because of the lack of transparency that occurs and the time pressure associated with the international review of what is submitted and goes forward from the U.S. petition.

We encourage this committee to stay engaged in this process to ensure at some point that there is transparency in this international regulatory process. It is extremely frustrating to have a product that is so critically important to us trivialized at the international level, based on the personal experiences of members of MBTOC on the circumstances of use in their country and the products that they claim we have as alternatives. We have products, alternatives that work in some areas of Florida better than others, and it is totally different than what the use patterns are in other countries. We are also at the point that we are using a process of production that has already minimized our use of methyl bromide to the point that we are at marginal efficacy for the primary pests

that have been identified as the controlling factors for CUEs, which a nut grass, purple and yellow, and the production practices we have.

In light of the question relative to the 2007 petition, and this is where a little history is important. The initial petition that we submitted was based on having a particular herbicide available in a cocktail of pesticides to allow us to achieve your equivalent efficacy to methyl bromide. After our initial petition was filed in 2002, that pesticide no longer was available because the registration was no longer available in the U.S. We have struggled to find alternatives to that herbicide to move forward; yet the numbers that we seem to be bound to, because of reductions, are based on some of the initial work that was done that included this particular herbicide. So we have some serious questions relative to our ability to meet the levels of reduction that the U.S. Government put forward in their 2007 petition, because looking at the research available in Florida, we are essentially no better off from an alternative standpoint than we were in 2002, which justified a much larger request.

With that, I will be happy to answer any questions as the committee meeting goes forward.

[The prepared statement of Mr. Botts appears at the conclusion of the hearing.]

Mr. LUCAS. Thank you. The Chair would now like to turn to the gentleman from California, Mr. Costa, for an introduction of our next panelist before she makes her opening comments.

Mr. COSTA. Thank you very much, Mr. Chairman. Those of us who serve on this committee from California are very pleased this morning to have Michelle Castellano testify as a witness. She comes from a part of our State that has a great deal of familiarity with the subject matter that we are dealing with here today.

As an attorney and vice president of the San Luis Rey company, Mellano and Company, San Luis Rey, she has experienced many efforts for us to continue to use methyl bromide in California under different changes of State law, and understands its applicability and importance to the American florist industry. Many people aren't aware of it, we have an active nursery and fresh-cut flower industry in California, throughout the central coast in particular. And it has had to deal with a lot of difficult challenges and a global world market. The use of methyl bromide is an important tool that the fresh-cut flower industry utilizes in terms of its ability to stay in business, along with maintaining the nurseries that are a viable part of that effort.

And we are very pleased to have Michelle Castellano here testifying, and we want to welcome you here on behalf of the committee, and those who serve on this committee from California.

Thank you very much.

Mr. LUCAS. You may proceed when you are ready, Ms. Castellano.

**STATEMENT OF MICHELLE CASTELLANO, VICE PRESIDENT,
MELLANO AND COMPANY, SAN LUIS REY, CA, ON BEHALF OF
THE SOCIETY OF AMERICAN FLORISTS, THE AMERICAN
NURSERY AND LANDSCAPE ASSOCIATION, THE FLORIDA
NURSERY, GROWERS AND LANDSCAPE ASSOCIATION, AND
THE CALIFORNIA CUT FLOWER ASSOCIATION**

Ms. CASTELLANO. Thank you, sir. Thank you, members of the committee. I am grateful for the opportunity to provide joint testimony on behalf of the cut flower industry, and the nursery and landscape industry.

The topic of continued availability of methyl bromide is of huge importance to our industry. Our industry represents 15 percent of the dollar value of U.S. crop agriculture.

I have submitted a written statement and would briefly like to comment.

The bottom line is we are in compliance with the Montreal Protocol, and we would be very happy to live within the parameters of the Montreal Protocol terms. However, the protocol that seems to be in place now is not the protocol that this government signed up for in the late 1980's. And my question and my concern today is, is this government going to protect us under the terms of the treaty that it originally agreed to?

I spent my Thanksgiving holiday, as did most people on this panel, at the international meeting of the parties. And that is why we are here today, to tell you firsthand that though we are in compliance with the protocol, the international Critical Use Exemption process that is taking place is not in compliance, and the ones that are suffering are our industries. We are cut flower growers in San Diego, and personally, if we don't have access to methyl bromide, we can not produce a competitive crop. What eventually is going to happen is that our industry will go south of the border to Mexico or another lesser developed country where, as indicated earlier, they don't have the same restrictions. And with that industry is going to go the jobs that are associated with it.

At the international meetings, many of these lesser developed countries, as well as the EU and environmental groups, are putting pressure on the voting parties, as well as MBTOC, to arbitrarily cut the U.S.'s requests with no scientific justification. There is an implication that there should be a phase-down, as indicated earlier, of our Critical Use Exemption. And again, this is completely out of the protocol.

Critical Use Exemptions, by the terms of the protocol, are supposed to be based on scientific research, all of which our applications are accompanied by. However, this arbitrary reduction seems to be taking place in spite of our scientific justifications. Despite our compliance, MBTOC took the United States' applications and, as discussed earlier, made a 27 percent cut across the board. That is an average cut. Everyone's commodities here were different, and in cut flowers, we actually got none whatsoever. So we are looking at 2006 right now with no CUE allocation.

At the international meetings, Claudia McMurray and her staff spent 4½ of the 5 days, I would say, inside rooms negotiating with the EU on these numbers. Claudia is doing a great job of standing firm for us; however, she should not have to negotiate that number

and come to a consensus with these lesser developed countries and the EU. We followed Montreal Protocol terms. We filed an application. We have the research that justifies our amounts. We have justified our need, and we are in compliance with the Montreal Protocol. And we look forward to our Government making sure that our agricultural industry is protected under the terms it originally signed up for.

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

[The prepared statement of Ms. Castellano appears at the conclusion of the hearing.]

Mr. LUCAS. Thank you.

Mr. Wasson.

STATEMENT OF RODGER WASSON, CALIFORNIA STRAWBERRY COMMISSION, WATSONVILLE, CA

Mr. WASSON. Yes, good morning. My name is Rodger Wasson. I am the president of the California Strawberry Commission. The Commission appreciates this opportunity to provide comments on the critical use exemption process for methyl bromide to this subcommittee.

Mr. Chairman, in consideration of time, I will summarize some of the high points, and I have written testimony that has been provided.

Until viable alternatives can be found, California's strawberry growers will continue to need access to methyl bromide. We have a long history of funding the alternatives research. We are going to continue to do so. Some of the hurdles the growers face are economic, and some of them are technical. Regardless, there are hurdles that are preventing a more rapid transition to alternative products.

Even with these challenges, we have already transitioned to having over 35 percent of our acreage, which is producing about 88 percent of the commercial production of strawberries in the United States, converted to alternatives. So we have got over 35 percent converted to alternatives.

Our situation is, though, that while the alternatives work well in some circumstances, they don't in others. They will work in some parts of the country, and in some parts of our State, and some other areas they don't work as well. But we are continuing to press ahead. We are continuing to see much expansion in interest by all of our growers in trying the various alternatives. And we expect to continue that way.

So our need for methyl bromide we believe can be fulfilled in the short-term through the critical use exemption process, if it is allowed to function as it was designed.

I think that it is important when we work in providing information to our Environmental Protection Agency, and we work very, very hard with them providing the answers. And we have got very complicated situations; the international body needs to recognize where this is coming from. You can't just have an international group or technical operating committee working globally, look back at the practices that we have here in the United States, and really be experts themselves, when they meet three or four times a year for a couple of days, and know all the circumstances, all the situa-

tions everywhere in the world, down to the township level. It is a very complicated situation. And in the State of California, we additionally have rules and regulations that restrict our ability to transition as rapidly as we would like in some cases. We have township caps. We have buffer zones. We have rules in the State of California so that even though a grower may want to be able to go into an alternative, in some cases, there is a cap that will not allow them to use that. And that keeps changing. And when you try to explain that through the EPA and on to the international body, it is something that understandably is very, very confusing. They can't relate to it. And in some cases, they will say "well, we understand you could still be able to use this alternative here." But what they don't understand in those cases is that growers of other commodities also can purchase the methyl bromide or can purchase the alternatives. And we have had townships in the State of California where growers were ready to move over to an alternative, and they could not do it. We are working through that. We are working with the producers of the alternatives. We are working through the Department of Pesticide Regulation. But this is an example of why when our country decides that we need a critical use exemption they have to take a strong stand. They have to stand strong. They have to go to the international community and explain, "we know what we are talking about." This is our circumstance, and we are going to work with the United States growers.

And they also have to go to that body, though, without assuming that there will be an automatic step-down. There isn't a policy in the United States, nor is there a policy in the Montreal Protocol, that has an arbitrary step-down of 20 percent a year, or something like that. We need to look at the crops, look at the commodities, see what is actually needed, and then take that request forward.

Now, I will say one thing. And that is in the State of California, there are some good ideas to look at. I mentioned that we have regulations that are unique to California that we have to balance with the international rules. But the other thing that we have done in the State of California, we have shifted our own methyl bromide rules and regulations to focus on what should be emissions. And so it is not so much just the tonnage that is used in key areas, it is what of the use of this product gets into the atmosphere. So we feel that there is an opportunity in this discussion to put more emphasis back into looking at emissions. For example, we are looking at technologies that would allow us to use less methyl bromide, perhaps emulsified with water, drip apply it, put it under tarps that are not allowing any to escape to the atmosphere. Basically have a huge reduction in any kind of emissions into the atmosphere. This should be part of the debate.

The other thing is that there continue to be products available that are still out there, such as halon. It is acknowledged as a much more serious concern to the environment and to the ozone layer. Why couldn't we explore swaps that would allow for the amount of methyl bromide that we continue to need; that instead that we destroy halon in exchange? That is something that should be on the table, as well.

Every other major international treaty that you are looking at now is having swaps, looking at s having emissions, or having in-

centives for the industries to make some of these transistions. They could be made a part of the Montreal Protocol, even though it wasn't anticipated when we started the Montreal Protocol. There is some fertile ground, I believe, for us to pay attention here.

And then just finally, I want to comment on a question that was raised about our competition to other countries. And I think that that is very significant. We know that in the last few years, China, in particular, has decided that they are going to focus on specialty crops. The congressman from California know, there is a long list of our commodities that have been very much affected and have been targeted by China. They have 10 more years to phase out methyl bromide. It is just another example of where there is a competitive edge. They have taken a lot of our freezer market away from us in Japan, and beginning this season, we are seeing a huge increase from China of frozen strawberries coming into the United States. And again, it is an example of where they have an additional 10 years to be able to use the product. That is very concerning to us.

I appreciate the opportunity to make these comments, and I would be happy to answer questions.

Thank you very much.

[The prepared statement of Mr. Wasson appears at the conclusion of the hearing.]

Mr. LUCAS. Thank you.

Mr. Carey.

**STATEMENT OF WILLIAM A. CAREY, SCHOOL OF FORESTRY
AND WILDLIFE SCIENCE, AUBURN UNIVERSITY, AUBURN, AL**

Mr. CAREY. I want to thank everyone for the opportunity to address the committee. Its efforts are vitally important to all the CUE applicants, I believe.

I can demonstrate the importance of this issue to our forest nursery industry by briefly describing the Southern Nursery Management Cooperative that I work for, our resources and the efforts we have taken out of those resources.

The co-op has 11 members, which are southern States. Six forest nursery industry members, and two private forest companies that pay us an annual dues of a little over \$8,000 a piece. And from this, we have produced the research effort that I have attached to my testimony.

Over 30 studies on methyl bromide alternatives since 1993, that is a lot of work. Over the last decade, most of that effort has been trying to determine how we will produce seedlings without methyl bromide.

Our efforts began in 1993, focused on the apparently doable job of finding a suitable replacement for methyl bromide among the registered and available chemical substitutes, such as dazomet, metham sodium, and chloropicrin used in various combinations. Surprisingly, the alternatives we tested produced some damaging side effects that we have not been able to control, and it is not the fact that the efficacy is not there. We can produce seedlings, but the liability is too great to implement a lot of these alternatives in many situations.

We have been involved in the CUE process since 2002, in the first round of meetings held by the EPA to discuss the application process. Working with instructions from these meetings, we filed our first CUE in September 2002. In October, I was asked by the EPA to help evaluate CUEs for other commodity groups. I think they got a pretty good understanding of the realities enforced nurseries by working with me and I working with them.

We worked through the allocation process for several things, and I was impressed that the economists, particularly with the EPA, were doing everything they could to put the biological information that I provided them in the form that MBTOC wanted to review, and that they then took this form forward and at least to my thinking, we were pretty roundly rejected.

I attended the next round of instructions on how to fill out the CUE the next year, and they admitted that we hadn't gotten everything we asked for, but they figured they knew how MBTOC would receive the next proposal, and that things would go a lot better. But the reason that didn't happen is I think why we are here today.

An economic assessment of methyl bromide by NAPIAP in 1993 estimated that the value to forestry nurseries was the greatest of any significant user, at about \$109 per pound of methyl bromide used. I have made similar estimates by projecting the present values for seedlings of different grades from actual data in treated and non-treated plots, based on size distributions. Although the figures in the 2004 nominations seemed to us to be minimal, I came to believe that we were past misunderstandings with MBTOC, and that the figures would pass essentially as taken forward. It didn't happen.

I have spent about 50 percent of my research effort on evaluating fumigants over the last 10 years. And in the last 3 years, with other members of the nursery co-op, I have probably spent about 10 percent of my time in filling out CUEs and in providing other data requirements. Given the amount of time that I have put in and occasional times when I thought I understood what was going on, it is amazing to me that I have very little idea of what I may have accomplished, if anything.

When methyl bromide was added to the Montreal Protocol, it was to be a scientific assessment of its role in ozone depletion. Data gathering went on for a couple of years, and then a number just seems to have been assigned. It seems that the methyl bromide allotted at the end of the CUE process is also going to be independent of data. But rather, will be arrived at from a number that is already known and working backwards. It would help us a lot if the CUE process worked as intended and if it can't work as intended, it would help a lot if we just knew what that number was so we wouldn't spend so much effort in producing data and in producing CUEs.

It may, as the saying goes, take an act of Congress. I think it would be really great if this committee had a scheduled meeting to receive our representation to the next CUE allocation on its return from its next meeting.

And that is all I have for the committee. Thank you very much.

[The prepared statement of Mr. Carey appears at the conclusion of the hearing.]

Mr. LUCAS. Thank you, sir. Independent of data, that is not quite defined as a scientific method to do anything. Independent of data. The one common theme that comes clearly from this panel is it appears that process that we have been involved in for now 20-some years by treaty could best be described as a system by which the real decisions are made in secret meetings. I think you kind of hinted at that. By which the rules are never endingly changing as the process proceeds through, and it appears we pay for a lion's share of the process of doing this wonderful technique. Most fascinating.

For those of you who have participated or been near the hearing process, could you answer me a couple of questions?

One, how have the U.S. delegations been received? What kind of treatment have they received from the rest of the groups at these meetings, No. 1.

And No. 2, let us expand for just a little bit more on the point made by Mr. Wasson about the additional 10 years that "developing countries" have to use these resources.

And in no particular order, first question about received, the second question about the impact that this developing countries language has on your industries.

Ms. FREEMAN. I am happy to speak, specifically to the first one, and I think that it should be worth noting that everyone at this table has a pretty healthy relationship, both with the folks at EPA and USDA and the State Department. We have a lot of respect for those people who put a lot of effort and time into a very small part of a very big treaty that means a lot to people. And because of their professionalism and because they have to live to fight another day, I think there are certainly things that they can't publicly say to this committee that, quite frankly, I feel very comfortable saying on their behalf. Or at least, my observations.

Their treatment at these meetings, though I am sure publicly respectful—and the treatment of the delegation in general and the treatment of the United States in general on most issues that I have observed in this process has been at the very least—I guess the only thing I can think of it is insulting. We bring good information, we bring our best efforts, our best experts. They get up early and they stay up late, and they do whatever hoops they are asked to go through. And they maintain a level of optimism that most of us find hard to maintain. And hope to have good news, and they come back at the end of the day usually and have to bear us bad news, sometimes worse than even we expected the worst case scenario to be.

And as far as the United States user groups, non-governmental groups that go to attend and try to observe as much as possible, and the people that we represent, our perception within the general community of the folks that usually operate in the terms of the protocol. It is sort of its own little body that does its own thing on a regular basis.

To say that we are not well-received and to say that there is contempt for our presence there, and probably some of that is brought upon our delegation would probably be an understatement.

Mr. LUCAS. And the effect of the 10-year language on developing countries when it comes to competition? And I believe that you said that you didn't have any allocation in your industry this last time?

Ms. CASTELLANO. Our allocation for 2006 was in the 10 percent that is going to be reevaluated now at the summer meetings. So when you discuss that cut, the entire cut flower industry's allocation was in that amount. And I will refer back to that.

The developing countries, I mean, I referred to it a little bit in my opening statement. In California, and especially in Southern California, we are very concerned with watching our crops disappear south of the border, and with the competition from China, as Mr. Wasson indicated earlier. If we have a need for methyl bromide to create our crop and we don't get our allocation, we can't create that crop. And of course, it is going to go 45 minutes over the border for me to where labor is cheaper, where they have no restrictions, and that is going to take place.

To refer to another question that I believe Representative Holden asked earlier, are other countries getting the allocations where we are not? As I stated, our application was rated as unable to assess, and we don't really know what that means, since MBTOC hasn't really come back and told us how they have made their determination. We do know that other countries with cut flower applications, such as Italy and Israel, who do not have as sophisticated research going on as we do, did get an allocation. So again, we don't know how that played out, but we do know that our application and our research is much more sophisticated. We got no allocation. Other countries did, indeed, get an allocation.

So that answers your question, at least from my industry's point of view.

Thank you.

Mr. WASSON. Mr. Chairman, I mentioned that in China, in particular, these aren't necessarily just small farmers that are expanding their agriculture. In many cases, they are in partnerships with multi-nationals and they are able to go to a country that has more favorable rules and regulations and operate competitively. And we don't think about them having a direct impact, but when they can send quick frozen fruits and vegetables into the United States at substantially lower prices because they don't go by the same rules we do, and when they get all these other advantages, it is of particular concern.

In particular, let me go back to before we got into this treaty. Their production, their acreage that they had in strawberry production, was about half what we have in the State of California. Now, they have over 10 times the acreage that we have. They have been growing in the face of it, and they have been showing, from what we understand, no indication of getting aggressively into these other sorts of alternatives. Although they are using some, they also are very, very committed to long-term use of methyl bromide. So they have a very damaging impact to us, and not just to our product, but others as well.

Mr. LUCAS. Thank you.

Mr. Holden.

Mr. HOLDEN. Thank you, Mr. Chairman.

Mr. Bair, in follow up to the question I asked Mr. Smith in the last committee about alternatives to methyl bromide, the Brown family, who operate a flour mill in Fleetwood, PA, tell my staff that they know of no alternative. And I believe you mentioned that in your testimony.

Is there an alternative that is viable, affordable that meets Federal requirements?

Mr. BAIR. Thank you, Mr. Holden.

Congress has appropriated about \$150 million for USDA to conduct alternatives research over the last 6 or 7 years. There has been very little that has come of that. I am not aware of any new pesticides that have been registered. There is sulfuryl fluoride, which already existed for termite uses and so forth. And it is not my objective to badmouth any alternatives because as prudent managers, we should be planning for a day when methyl bromide is not going to be available any longer. And we are doing that.

We don't want to say any bad things about alternatives. We don't want to see potential alternatives go away, but the short answer to your question is that today there are no alternatives. I would comment on the written testimony that you received from Dow AgroSciences where they claimed that they could replace 40 percent of the fumigations in the industry this year. And that is simply, I think, not true. They did 8 percent of the fumigations last year, according to their math. Forty fumigations in our industry results in about 8 percent of the fumigations. How they would get to 40 or 50 percent, I really don't know. On a day like today when it is cold, you simply couldn't use sulfuryl fluoride to fumigate the F.M. Brown's Mill in Fleetwood, Pennsylvania.

High heat, other kinds of treatments we are experimenting with, but they either aren't technically feasible or they are not economically feasible. Our industry is one that has, over the last couple of years, permanently closed 10 percent of our industry capacity. And that is a huge economic adjustment. That has been a huge rationalization of our industry, and the pressure on margins is intense, and the costs of most of the alternatives is about four times what a methyl bromide fumigation is.

To fumigate that mill, for example, would probably cost between \$5,000 and \$10,000 for methyl bromide fumigation. For the alternatives, it is going to be closer to \$40,000. And that is if the weather were warm enough that would allow you to even use it.

Thank you.

Mr. HOLDEN. Mr. Wasson, in your written testimony, you mentioned that the parties to the protocol should shift their focus from reducing the use of methyl bromide to managing the emissions. What tools and incentives would growers need to better manage emissions?

Mr. WASSON. Well, a couple of things. I mean, I think that in that process, we are talking about technologies that would also allow them to use less material. I mean, there actually could be an economic advantage if we were able to manage the emissions and use application systems that kept those under control.

We are working right now with growers that are learning how to manage the air emissions in their areas, and we are working with county commissioners to keep track of ambient air levels to

be sure that they are beneath safe levels and very safely into safe levels. And so I think that if we could start moving in that direction, if we could start having even more experimentation, if we thought that we could use different types of mulch, different kinds of application systems, that would, then, allow us to use a certain amount of methyl bromide for some time into the future, almost sort of a prescription sort of use when you ran into problems with the alternatives.

But the growers are very interested in seeing this go to these kind of approaches.

Mr. HOLDEN. Thank you.

Mr. LUCAS. The Chair turns to the gentleman from Michigan.

Mr. SCHWARZ. Mr. Chairman, it is kind of difficult to parachute back into these meetings when you are talking about some of these chemical applications. And so getting in in the middle of conversation is a little difficult. However, you were talking about one of the things that I would like to emphasize to my folks back home, and emphasize to the individuals who want you to find an alternative yesterday.

And that is this. This is methyl bromide. This is a really simple compound, and it is in an era when the simple, effective compounds are the exception and not the rule. And I understood as I just walked back in the room here that methyl bromide, as compared to the alternatives that are out there, and the alternatives that are being—is voiced too strong a word? Probably not. Voiced upon you. Methyl bromide is significantly less expensive, and the alternatives and using the alternatives really threatened the business viability of some of you and your operations, and some of those crops. Is that correct? And anybody can pick that up. So if I go out and say, look, it is ridiculous to so strictly keep methyl bromide off the market. And one of the advantages it has is its price. It is a huge advantage and it allows certain horticulture operations, agricultural operations to stay in business. Is that a fair statement?

Mr. BOTTS. Congressman, I would like to take stab at answering that, because we had tracked some of the prices associated with methyl bromide since 1993, when it was first listed as an ozone-depleting substance. And just to give general numbers, because I don't have the specific tables in front of me. It went from 84 cents a pound at that point to where it was almost \$3 a pound last year.

Are we at the margin of where you reach economic efficiency with methyl bromide? In certain marginal applications, there is places methyl bromide is probably right at the end of its economic viability if it was put under the same type of scrutiny for economic viability that is being looked at at the international community. Having said that, the alternatives that we are looking at out there, when you combine technically feasible and economically feasible, there is research generated out there by USDA and others that you could probably make the alternatives that they have identified work as technically feasible replacements to methyl bromide alternatives. Every single one of those represents significant changes to production practices, either adding additional drip tape so that you get even distribution under our circumstances in Florida, changing the bed widths, changing your whole production scenario and planting process so the pure price of the individual products is not

truly what is driving the issue. But you are at a point now where we are looking at a situation where there would be decisions at the grower level under current circumstances about whether to go forward at all, even with the alternatives on methyl bromide, if the price of methyl bromide got much more than what it is right now.

I would like to answer one question or bring up a point——

Mr. SCHWARZ. Let me ask another quick one before you answer, if I may. What is the breakdown product of methyl bromide, just methane gas and some sort of inorganic bromine compound, inorganic bromide of some kind?

Mr. BOTTS. I am not sure.

Mr. SCHWARZ. Is there anyone there that can answer that question?

Mr. CAREY. It is methyl bromide.

Ms. FREEMAN. Yes.

Mr. SCHWARZ. Pardon?

Mr. CAREY. It doesn't break down.

Mr. SCHWARZ. It does not break down at all?

Mr. CAREY. When it leaves the soil, it leaves the soil as methyl bromide. It leaves the soil the same way it goes in.

Mr. SCHWARZ. OK. So it doesn't break down into methane and another brominated compound? And it goes into the groundwater as methyl bromide?

Mr. CAREY. Well, I don't think it goes into the groundwater at all.

Mr. WASSON. I think you raised an important issue, because all of these compounds have issues.

Mr. SCHWARZ. Well, that is where I was going next. In looking at what some of these other compounds are, it would seem to me that some of the detritus they leave behind is an awful lot more dangerous than methyl bromide. And some of these, I believe, would leave some of the dioxin compounds behind in their manufacture.

Mr. WASSON. Well, I think that is where the disconnect is, that you have an international treaty that is saying, we are just focused on methyl bromide, so just switch to anything other than methyl bromide.

But you get down to the county and the township levels where we work, and there are people that would say, we would prefer, even from a safety standpoint, that you continue to use methyl bromide. We have county commissioners that if they were going to rank the compounds that can be used to fumigate the soils, some of them would say that methyl bromide is the safest, we feel, the easiest to work with.

Some of the compounds that are alternatives were banned in California, and they now can be used at certain limited levels. They were banned because of concerns with groundwater, and that they were identified as a carcinogen if improperly handled. And yet, if you tried to bring that up at the international level, they say well, that is not our problem. We are dealing with methyl bromide. We are dealing with the ozone layer. But if you go to a neighborhood that has got a farming operation, right next to a farming operation, they say I don't care about the international group. Maybe I want

to understand these compounds that you are going to be using alternatively.

And there are issues. They are good products, but all of them have to be respected. All of them have other offsetting issues, and the Congressman is exactly right, I think, for bringing up that discrepancy.

Mr. SCHWARZ. Thank you, sir. Well said, far better than I could have.

Mr. BAIR. Mr. Chairman, since my use is different than his, I would like to dovetail on that. But Mr. Schwarz, I would say that in your district, you have a very fine company, the Jiffy Mix Company.

Mr. SCHWARZ. Michigan, you bet. Also the home of—

Mr. BAIR. And they manufacture a lot of mix products. Well, for example, in our case, the alternative that is being touted and about which you have received written testimony, is not approved for use on things like sugar, shortening, salt, any kind of spices. So while it might be able to be used in just the flour mill, it would not be able to be used in Chelsea Milling, for example, because they have got all these other ingredients, and the label for this product doesn't allow its use on any of those other food substances, enrichment or any kind of ingredients. It also is not approved in California, which is the second largest milling State in the country, and it also has very few international tolerances, so for anybody that wanted to export products, any residues of this alternative would render that food illegal.

Mr. SCHWARZ. Thank you, sir.

Mr. LUCAS. The gentleman's time is expired. We turn to the gentleman from California.

Mr. COSTA. Thank you very much, Mr. Chairman.

In listening to the testimony from the various witnesses, I sense the level of frustration, and I want you to know it is obviously shared by members of the committee here. Mr. Wasson and Ms. Castellano knows of my involvement for some 15 years in California, in which from a standpoint of health and safety in terms of risk assessment and risk management, we have in some cases actually exceeded Federal standards and made it more difficult there for producers to use various applications.

I guess what I would like to ask, hearing the testimony and the frustration involved in the various CUE process that has taken place recently. What do you believe that this committee could do to try to have a positive impact in what has been a very difficult process in which we see that process being arbitrary, in my view, and capricious in terms of how the negotiations have impacted our ability to compete and use the application of methyl bromide? What do you think this committee can do in terms of its influence towards the EPA or the State Department, notwithstanding the comments that you have made that these people are trying to do the best that they can. And I believe that. But the fact is, is that short of walking away from this treaty, where do we let the international community understand that we believe we are getting gamed in this process, for lack of a better term?

Who would like to comment on that?

Mr. BAIR. Congressman Costa, I will take a shot at it.

There is legislation before the Congress. It was in the last session and we believe that there will be legislation introduced very soon, if it hasn't been already, that would essentially approve the U.S. critical use nomination without having to go through the international review. Despite some of the negatives things that we have said about how we have taken cuts from EPA, they are our ally in this. We depend on them to take these nominations forward and defend us. And they spend hundreds of hours and many thousands of dollars and dedicate a lot of staff resources into analyzing and reviewing all of our applications. But then it goes to this international body and people who aren't accountable to U.S. taxpayers make decisions that affect billions of dollars of commerce in the United States. And our view is that that is forfeiting our sovereignty to people who aren't accountable to us.

So we would like to see the U.S. nominations——

Mr. COSTA. You have cleared these decisions in an arbitrary way?

Mr. BAIR. We believe so. In my own example of our application, even though it gets cut every time, in all my years of working on this, I have never once received a phone call, a letter, an e-mail, a request to come visit a grain mill in the United States, to give us an opportunity to defend our application. Nobody has ever said, we question this number. Tell us how you arrived at it. We'd be happy to do that. We happen to have a lot of confidence in the application. We would love for them to come and tour a U.S. grain mill and see the unique circumstances that we have. That has never once had that kind of a request.

Mr. COSTA. Ms. Castellano, in contacts of the international market where the fresh cut flower industry participates, can you determine if your competitors are getting their methyl bromide requests in?

Ms. CASTELLANO. In looking at countries such as Italy, France, Israel, Spain, those were other applications that came in with cut flower requests, and they did indeed get an allocation for 2006, the same year that we were considered "unable to assess".

So I guess the short answer to your question is yes, they did get an allocation whereas we got none.

Mr. COSTA. Mr. Wasson.

Mr. WASSON. To your question of what can Congress do, I think that we have had a good team. We have had a good relation with the State Department, the EPA, the USDA. I think that Congress needs to reinforce that they can take strong stances. That they don't have to cave in to some sort of arbitrary pressures coming from the international community that has an expectation of almost like what has been said on the floor of like 20 percent a year. What does that have to do with what the reality is and the commodities that we are producing here in the United States? And I think to the extent that you have reinforced that, they can take a strong stand, and they can leave without agreement. And that has happened before, and it happened at the meeting in Nairobi. That we couldn't reach agreement, and our people walked away. They should be applauded for that, and they may have to do it again.

Mr. COSTA. Thank you.

Mr. LUCAS. The gentleman from Kansas.

Mr. MORAN. Mr. Chairman, thank you.

I think since I have arrived in Congress this has been a topic of conversation, discussion, and hearings. The status of where we are today, as compared to where we were now 9, 10 years ago, and then second, Ms. Freeman's commentary about we are treated at negotiations, what makes the United States unique? Why is this so important of an issue to us and our industries? Is it because of the magnitude of what we produce, the variety of products, the alternatives? Why is the United States singled out that this is such a critical issue for us?

Ms. FREEMAN. In very general terms, the United States does put in the largest nomination among all the other countries. It is probably also worth noting for a host of reasons for why methyl bromide is so important to the people who don't have alternatives. Even those countries that may be competing with us not using methyl bromide typically are developing nations that, for example, they don't have the labor laws that put restrictions on hand weeding, and they can afford to pay as many people as it takes to go out and hand weed. And so some of the competitive advantages, or just the competitiveness that methyl bromide brings to the table with countries that still have access to it, and with those that don't, it is one of the key factors for why methyl bromide is important to our competitiveness.

It is also worth noting that there are countries out there who are somewhat similarly situated to ourselves, developed nations, unfortunately, some of those folks happen to be in the EU, and they also have been sincerely cut. Unfortunately, their counterparts in the EU have not been supportive of helping them get what they need. So their voices have somewhat been muffled. So it seems like it is just the United States standing there, sort of crying or whining, and it makes it very easy, I guess, for those who may see an advantage, economic or political, to maybe come after us for maybe this reason or reasons not related to the Montreal Protocol at all.

Mr. MORAN. Excuse me for interrupting my own question, but is our concern with the process, or do we have complaints with our own Government officials and the role that they are playing in advocating on behalf of your interests?

Ms. FREEMAN. I think my observation would be that it certainly is most generally with the process. That in earnest, it certainly hasn't been every meeting we have ever had here in D.C. about this has always gone out and everybody has agreed. But it has been a respectful disagreement, and we have worked through it. The actual breakdown in the process most definitely has occurred at the international level.

Mr. BOTTS. I would like to build on that just a little bit, having been to several of the open-ended working group meetings and meetings of the parties. It appears when these issues come up—and part of it is because the U.S. nomination is the largest nomination of all the countries that are submitted in total pounds of methyl bromide. But the way the meetings are structured in such a manner of building consensus, and the term consensus used in an international level is different than consensus that I have ever been exposed to in this country.

But the way the process has been pushed, especially on the critical use nominations, is it goes all the way down to the last minute possible that a decision can be made. And essentially, everybody is pushed into a corner and then politically, it is if they come out with a no decision, you are trying to somehow disrupt the Montreal Protocol.

So our Government, in the negotiations, has been as strong as they possibly can be, and have been extremely supportive of this process. There are other governments and other consortiums of countries out there that seem to be more willing to play the system and push it to the brink, and yet, they never get credit for doing that. It is always the U.S. that is portrayed as being the obstruction in this process. We have come to these meetings with the criteria and information that meets their definition of what is needed to be done, and then somehow we are painted as being the bad guy in this whole process throughout the negotiations.

And a point to somebody's question relative to the developing nations' issues there, the last several meetings, most of the discussions surrounding methyl bromide in the public forum have been related to ensure how the developing nations can maintain their use of methyl bromide even past the 10-year exemption, because of the very same reasons that we are looking for critical use exemptions here. They would like to see the U.S. exemptions reduced, because it gives them access to the U.S. market with production of a tool, and that is primarily in the Latin American countries and the Caribbean countries that have been pushing the hardest to maintain their ability to use methyl bromide, and they want the U.S. market handed to them on a platter by our inability to remain competitive if we lose methyl bromide.

Mr. MORAN. Mr. Chairman, thank you.

Mr. LUCAS. Thank you. And thank you, panel, for your insights that you provided, and that last particular answer, which probably fits the traditional political axiom that nothing ever happens by accident in the process.

Without objection, the record of today's hearing will remain open for 10 days to receive additional materials and supplemental written responses from witnesses to any question posed by a member of the panel.

This hearing of the Subcommittee on Conservation, Credit, Rural Development, and Research is adjourned.

[Whereupon, at 12:20 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

STATEMENT OF CLAUDIA McMURRAY

Mr. Chairman, members of the subcommittee, thank you for the opportunity to deliver this methyl bromide statement on behalf of three Federal agencies—the Department of State, the Department of Agriculture, and the Environmental Protection Agency. We realize that methyl bromide, and its phase out under the Clean Air Act and Montreal Protocol are issues of great importance to many of you and your constituents. While the focus of your hearing is on methyl bromide, I would like to begin by providing a brief overview of our ongoing efforts to protect the ozone layer under the Clean Air Act (CAA) and the Montreal Protocol.

Since the Montreal Protocol's inception in 1987, the United States has exerted strong global leadership in making the transition away from ozone-depleting substances and toward the development of new technologies that are safe for the ozone layer. The United States continues not only to meet all of its obligations under the

Montreal Protocol, but, in fact, has already phased out the consumption of nearly 97 percent of all ozone-depleting substances controlled by the Montreal 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.

A major goal of both the Montreal Protocol and the Clean Air Act is to protect public health from harmful UV radiation. We are clearly moving in the right direction. In fact, the legislative evaluation required by the Clean Air Act's section 812 estimated that full implementation of the Montreal Protocol will save 6.3 million U.S. lives from skin cancer between 1990 and 2165. And, we are working with groups like the American Academy of Dermatology and the National Council for Skin Cancer Prevention in education programs like SunWise Schools to further reduce risks of skin cancer, especially for kids. The Cancer Research and Prevention Foundation's Congressional Families Action for Cancer Awareness recognized the importance of EPA's sun safety programs in 2003. Because skin cancer, a preventable disease, kills one American every hour, it is the government's obligation to both provide the public with information to mitigate the impacts of sun exposure and control the chemicals that damage the stratospheric ozone layer.

Our great successes do not mean that our task is done. In fact, 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 is susceptible to damage because stratospheric concentrations of ozone-depleting chlorine is at or near its peak, while bromine, although still increasing, may peak over the next several years. In addition, seasonal damage to the ozone layer resulting in the "ozone hole" in the Antarctic continues; in the 2003 season the hole reached its second largest extent, covering an area roughly the size of North America. Ultimate recovery of the ozone layer—and the consolidation of all the gains made so far—depends on our will, and that of the global community of Parties to the Montreal Protocol, to finish the job.

Staying the course matters to public health and to the ozone layer, but it also matters to the many businesses who took the risk of investing heavily in alternatives that do not damage the ozone layer. This substantial financial commitment by 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 United States 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, which was started by President Ronald Reagan.

That brings us to the topic of today's hearing, methyl bromide. We know a number of things about this chemical. First, it is a widely used biocide that is highly effective in killing pests that are of concern to agricultural interests in the United States and many other countries. Second, the United States has been the world's largest producer and consumer of this substance. Third, methyl bromide has been in wide use in the United States for decades, and users find it efficacious and are using it efficiently. Fourth, while there are alternatives available today for many uses in many situations, there is no alternative that can operate as effectively as methyl bromide in all the crop situations where methyl bromide is used.

A brief history is necessary to understand methyl bromide's current regulatory status under the Clean Air Act. The 1990 Clean Air Act required EPA to phase out the production and import of any newly identified substance with a significant potential to damage the ozone layer within seven years of listing the substance, without exceptions or exemptions. In 1991, the EPA received a petition to list methyl bromide and promulgated a rule which established a U.S. phase out date of 2001. In an effort to address both the environmental concern and an agricultural concern that a unilateral U.S. phase out in 2001 would put the United States at a disadvantage relative to other developed nations that are agricultural competitors of the U.S., successive U.S. delegations to the Montreal Protocol pushed the global community to adopt the U.S. phase out date of 2001. In 1997, the United States succeeded in moving developed countries from their initial agreement to simply freeze production and import at historic levels to a phase out of methyl bromide in 2005, with exemptions and interim reductions in 1999, 2001, and 2003. Given that progress, and the desirability of ensuring harmonized requirements, Congress moved to amend the CAA in 1998 to conform the U.S. phase out schedule with that faced by other developed country Parties to the Montreal Protocol, resulting in the phase out schedule we have today. This schedule called for a freeze in methyl bromide production and consumption for developed countries in 1995, a 25 percent reduction by 1999, a 50 percent reduction by 2001, a 70 percent reduction by 2003, and a full phase out by 2005, subject to certain exemptions.

Users have made and are continuing to make progress in reducing the use of methyl bromide, in fulfillment of our obligations under the Montreal Protocol, by using newly approved substitutes and implementing innovative new technologies and practices. Under the U.S. Department of Agriculture's (USDA) Methyl Bromide Alternatives Program (Methyl Bromide Alternatives at <http://www.nps.ars.usda.gov>), agricultural and forestry leaders from private industry, academia, state, and Federal agencies have come together to develop viable alternatives to methyl bromide. This research program has taken into account input from Federal agencies as well as extensive private sector research and trial demonstrations of alternatives to assess the problem, formulate priorities, and implement state-of-the-art research.

From 1993 through 2004, the USDA Agricultural Research Service has spent approximately \$172 million in an aggressive research program to find alternatives to methyl bromide. Through the Cooperative State Research, Education, and Extension Service, USDA has provided an additional \$19.7 million since 1993 to state universities for methyl bromide replacement research and education. These federally supported research activities are in addition to extensive private sector efforts.

Nearly 80 percent of pre-plant methyl bromide soil fumigation use is in a limited number of crops. Much of the Federal Government's pre-plant effort has focused on strawberries, tomatoes, ornamentals, peppers, and nursery crops, (forest, ornamental, strawberry, pepper, tree, and vine), with special emphasis on tomatoes in Florida and strawberries in California as model crops. Methyl bromide users have contributed field plots, plant material, and equipment for research trials on potential alternatives.

At the same time, innovative U.S. technologies and practices allow our growers to make the methyl bromide we do use go as far as possible toward controlling key pests. The reductions in U.S. consumption over the past few years have been successfully accomplished in part because manufacturers and users have found that it is possible to dilute methyl bromide with other pest-control compounds, like chloropicrin, use barrier films, and lower rates of methyl bromide and still obtain effective pest control.

Another important area of emphasis is our responsibility to help identify, register, and implement safe and effective alternatives. Understanding the importance of this in the phase out of methyl bromide, EPA has since 1997 made the registration of alternatives to methyl bromide its highest registration priority. Even under the new "fee-for-service" system, EPA is committed to giving methyl bromide alternatives priority. As one incentive for the pesticide industry to develop alternatives to methyl bromide, EPA has worked to reduce the burden of data generation to the extent feasible while still ensuring that the Agency's registration decisions meet Federal safety standards. Where appropriate from a scientific standpoint, EPA has refined the data requirements for a given pesticide application, thus facilitating the research and development process for methyl bromide alternatives. Furthermore, EPA scientists routinely meet with prospective methyl bromide alternative applicants, counseling them through the pre-registration process to increase the probability that the data are collected and submitted correctly for the first time, thus minimizing delays.

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

In addition, EPA is currently reviewing several applications for registration as methyl bromide alternatives, including iodomethane as a pre-plant soil fumigant for various crops, and dazomet as a pre-plant soil fumigant for strawberries and tomatoes. While these activities are promising, environmental and health issues with alternatives must be carefully considered to ensure we are not just trading one environmental problem for another. As required by Federal pesticide laws, including the Food Quality Protection Act, EPA is currently conducting tolerance reassessment and reregistration of methyl bromide to ensure that its registered uses meet today's health and safety standards. To facilitate this review, EPA expects to release the

preliminary risk assessment for methyl bromide and other soil fumigants this May 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.

While we continue our domestic programs to facilitate the phase out of methyl bromide, the Parties to the Montreal Protocol recognized that widespread use and the difficulty of finding feasible alternatives to methyl bromide made its phase out more difficult than other chemicals controlled in the past under the Montreal Protocol. Accordingly, the Parties to the Montreal Protocol created three types of exemptions for methyl bromide.

First, the Parties recognized that methyl bromide is vitally needed in trade to ensure that shipments do not contain harmful and invasive pests that could be transported with commodities and introduced into new areas. Thus, they provided an exemption for quarantine and preshipment uses. As a consequence, while countries have committed to find alternatives and to limit the emissions and use of methyl bromide to those applications where its use is necessary, the production and import for these uses can continue during and after the phase out. On January 2, 2003, EPA published the Final Rule fully activating this exemption.

The second methyl bromide exemption, covering emergency situations, is an exemption from the phase out for the production or import of 20 metric tons of methyl bromide per event. This exemption can be activated by a Party to address what it considers to be an emergency. The real possibility of emergency needs that cannot be anticipated, like anthrax contamination, makes it especially vital for countries to have the flexibility to make methyl bromide rapidly available for such needs.

Third, the Parties created the critical use exemption (CUE), which is in some ways similar to the other safety valve available under the Montreal Protocol for CFCs, the essential use exemption. The Protocol's criteria allow any developed country that is a Party to the Protocol to seek an exemption from the phase out if it determines that the absence of methyl bromide would cause a significant market disruption. The Parties must agree that the nominating Party has demonstrated that there are no technically and economically feasible alternatives for the use in the context of the application and that the Party continues to make efforts to find alternatives for the use and to limit emissions. I want to focus on this exemption today.

The United States was one of 17 countries that have submitted nominations for critical use exemption. Some national requests were very small, covering only one use, and some were large, covering 10 or more uses. The amount of methyl bromide nominated by the United States for these uses was 9,920,965 kilograms for 2005, 9,722,546 kilograms for 2006, and 7,398,900 kilograms for 2007—this translates into 39 percent, 37 percent, and 29 percent respectively of our 1991 baseline level for methyl bromide uses.

Each of these annual nominations was developed through a rigorous technical process involving the careful efforts of many technical experts. For the most recent 2007 nomination, for example, EPA's Office of Pesticide Programs, with collaboration from the USDA, worked intensively with growers to fully understand genuine critical needs in various states and agricultural sectors. This allowed EPA's and USDA's expert scientific and economic staff to develop technically supported estimates for U.S. critical needs for methyl bromide in 2007 which were then shared with policymakers through an interagency process involving the State Department, USDA, EPA, and the Council on Environmental Quality. Each year the technical estimate has been lower than the previous year because parts of some sectors switch to alternatives, some sectors drop out altogether if they do not need the exemption, and because we obtain better information that allows us to more accurately estimate the true need for methyl bromide.

The value of this careful and collaborative consensus-building process has been demonstrated in our consistent success thus far with the Parties, who have approved the vast majority of each annual CUE request submitted by the U.S. so far. Specifically, Parties to the Protocol approved more than 90 percent of our request for 2005, amounting to slightly over 37 percent of baseline consumption. With respect to 2006, the Parties have approved the U.S. request to produce and import a total of 27 percent of the 1991 baseline consumption of methyl bromide, or about 6,900 metric tons for 2006. In addition, the Parties granted interim approval for the balance of the U.S. request for 2006, which represents almost 10 percent of the baseline amount. Final decisions on this increment will be made at an Extraordinary Meeting of the Parties to be held July 1, 2005 in conjunction with the Proto-

col's annual preparatory meeting. Similar decisions were made for the 15 other countries requesting CUEs for 2006.

It was clear at the meeting that the CUE process, involving literally hundreds of individual crops and users in seventeen countries, presents an unusually difficult challenge for the Methyl Bromide Technical Options Committee (MBTOC). With strong support from the United States, 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 United States welcomes these improvements and believes these new guidelines will ensure that MBTOC reviews fully consider the relevant technical and economic criteria contained in Montreal Protocol decisions and transparently describe the basis for their judgments. The revised guidelines also allow for more extensive and direct communication between the MBTOC and the nominating Party, and will provide additional time after MBTOC makes a recommendation for a Party to appeal the decision.

We also support the so-called multi-year approach which would provide benefits in terms of time savings for the MBTOC and the Montreal Protocol Parties reviewing CUE nominations, as well as for the Parties that have to develop them. A multi-year approach would allow MBTOC to approve CUEs for several years at one time, thus providing greater predictability for the user community. In November 2004, the Parties agreed to elements related to multiple-year CUEs, and we are pleased that this issue will continue to be discussed at future Meetings of the Parties.

Mr. Chairman, I hope my testimony demonstrates that the Administration takes action on methyl bromide in a manner that protects public health, while still ensuring the critical needs of our farmers are met. The agreements reached on methyl bromide at the recent Meetings of the Parties demonstrate the continued vitality of the Montreal Protocol and the ability of the Parties to adapt to changing scientific and technical information. Although we still have more work to do, we believe we have fostered a greater understanding and appreciation of the technical and economic basis for the U.S. CUE request. The U.S. position at the Prague Meeting of the Parties demonstrated the strong continued support for the Montreal Protocol as well as our firm commitment to phase out methyl bromide once technically and economically feasible alternatives are available for our agriculture sector.

I thank you for this opportunity to testify before this Committee 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.

ANSWER TO SUBMITTED QUESTION

Secretary McMurray, you seem to be a little more positive than some of the industry folks that a multi-year approach to the CUE process will happen. You indicated that the parties "agreed to elements related to multiple-year CUEs" at the Prague meeting. What is the status of moving to a multi-year approach?

At the Sixteenth Meeting of the Parties to the Montreal Protocol agreement was reached on elements of a broad framework for deciding whether or not to approve a critical use exemption for a duration of more than 1 year. Under that agreement, any multi-year approach would take into account a number of factors, including methyl bromide use patterns and the likelihood or improbability of alternatives being developed. We expect to address these elements further at the Seventeenth Meeting of the Parties to the Montreal Protocol to be held in Dakar, Senegal in December. We hope to make progress in achieving greater support for a multi-year exemption, but this task will be difficult given that a number of countries have expressed opposition to the concept.

STATEMENT OF JAMES A. BAIR

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.

The CUE process. Mr. Chairman, the parties to the Montreal Protocol process possess an unhealthy passion for secrecy and undemocratic decision-making. That is irrational, unfair to U.S. 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. Mr. Chairman and members of the subcommittee, I do not think the U.S. government should agree to meetings that force its citizens to choose between personal safety considerations and representing their business interests; nor should they have to pick between spending the most American of holidays with family or representing their business interests.

Even when the meetings are held in a foreign location a U.S. citizen can reasonably attend, the substantive negotiations are held behind closed doors. I personally have attempted to sit in on such sessions, not to participate but merely observe. When I and other U.S. food and agriculture representatives are noticed, we are kicked out of the room.

As if that were not enough, the U.S. is the largest financial supporters of the Montreal Protocol activities. To pick just the three recent years (2003–05), the so-called Multilateral Fund of the Protocol is 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 well-being.

American agriculture is justifiably skeptical about fair treatment from the United Nations. The CUE approval process is agenda-driven and highly politicized. Ultimately, the fate of the U.S. CUE applications that are recommended to the parties of the Montreal Protocol are determined by a handful of individuals unaccountable to U.S. taxpayers, behind closed doors.

Some of the U.S.' critics in the Montreal Protocol negotiations are from countries that have no significant agriculture or food processing industries and therefore have never used much methyl bromide. So it's easy for them to say it ought to be banned.

Others are from countries that are agricultural competitors of the U.S., and they are unlikely to willingly surrender the competitive advantage that has been handed to them.

Arbitrary cuts in our CUE. In multiple hearings of this and other Congressional committees, we have described how, even in advance of the Montreal Protocol phase-out, the industry dramatically cut its usage of methyl bromide to one-fourth of the amount allowed by the EPA-approved label.

Further, the NAMA Critical Use Exemption (CUE) request has voluntarily reduced the requested amount each year.

Yet, we still meet with an antagonistic and, we believe, pervasive anti-United States attitude in the meetings and decisions of the Montreal Protocol.

The Protocol parties cut the NAMA allocation by 10 percent in 2005, and recommended another 10 percent for 2006. I cannot say what the basis for those cuts is, since I have never once been contacted by Protocol technical staff. Never once have I been asked to justify a request nor given the opportunity to defend one. Not one phone call, letter or email. Not one request to visit a U.S. grain mill to see first hand the factors that make methyl bromide necessary.

The arbitrary cuts by the U.S. EPA and the further 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.

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.

The focus of today's hearing "Critical Use Exemptions" is an excellent case in point. 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. As we now know, they were prescient.

Those authors included language in the treaty that stated that for those industries, a critical use exemption (CUE) 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 U.S. negotiators agreed to nor what the U.S. Congress ratified.

If agriculture and food processing uses of methyl bromide are very harmful to the environment, then it should be banned globally on the same date, and the sooner the better. But banning methyl bromide in the U.S. while allowing our competitors to continue using it merely shifts jobs and economic activity to those competitors with no real gain to the environment. That is a false choice and the U.S. should not be pressured to make that choice.

Declare victory over ozone-depleting substances. Mr. Chairman and members of the subcommittee, food and agricultural uses of methyl bromide are of little environmental significance since, according to the EPA website:

- Anthropogenic (man-made) methyl bromide has contributed a total of about 4 percent to ozone depletion over the past 20 years. Of this, about 2.5 percent can be attributed to agricultural fumigation activities.
- The MBTOC (United Nations Methyl Bromide Technical Options Committee) recommendation to approve 35 percent of the U.S. 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. (emphasis added)
- Further, the 35 percent figure represents only 1.5 percent of ozone depleting potential caused by all ozone depleting substances in 1989 in the United States

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 to achieve. The difficulty in achieving them will be vastly offset by the benefits to agriculture and food production. It is time to declare victory and stop this irrational pursuit of an unwarranted total elimination.

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

STATEMENT OF RODGER WASSON

The California Strawberry Commission was established under California law and represents approximately 600 growers, shippers and processors of strawberries in California. California produces 88 percent of the Nation's strawberry fruit (approximately 1.6 billion pounds) with a farm-gate value of \$1.2 billion.

The Commission recognizes that most of its members will need access to methyl bromide until suitable alternatives are found. Much of the California strawberry industry is dependent on the use of a pre-plant soil fumigant to produce its crop. To address this need, we have been a leader in research funding for the development of alternative fumigants and have invested over \$8 million of member funds in alternative research since 1992. As a result of this research, 35 percent of our industry's acreage was treated with alternative fumigants in 2004 and growers continue to make this transition. However, there are serious regulatory, technical and economic challenges that prevent a larger number of California's strawberry growers from using currently available alternatives. It is for these growers that we continue to fund research into alternatives and pursue the continued long-term availability of methyl bromide.

Current regulations in California force most growers to broadcast apply methyl bromide, a method in which the entire field is treated instead of solely the planting bed. However, for growers who have transitioned to alternative fumigants, a majority apply them by drip fumigation, a process where only the bed is treated. This practice significantly reduces the cost of the treatment and helps to offset the increased weeding costs and reduced yields associated with using alternatives. How-

ever, for many California strawberry growers, there are numerous challenges restricting their transition to alternative fumigants. These challenges include: (1) township caps that restrict the use of Telone (a component in a preferred alternative), (2) field topography and (3) a significant increase in production costs in the northern production region when using drip fumigation.

(1) Telone township caps. The availability of 1,3-D in California is handled by a Telone management plan. This is an agreement between California Department of Pesticide Regulation (Cal DPR) and Dow Agro-Sciences where the annual use of 1,3-D is limited to 90,250 lbs (1X) per year, per township (a township contains 36 square miles). There is a cap for Telone because 1,3-D is on California's Proposition 65 list of chemicals that may cause cancer. To protect public health, Cal DPR is managing the use of 1,3-D to ensure that cumulative lifetime exposure of the chemical remains below a certain level. This level is typically expressed as an average daily dose spread over a 70-year (lifetime) exposure period. 1,3-D's use in California was banned for several years, and then restricted to 90,250 lbs per township per year. Since 2002, Cal DPR has allowed an increased allocation up to 180,500 lbs. (2X) and on a case by case basis up to 2.8X. Use above the 1X annual township cap draws upon a "bank" of 1,3-D allocation that was available but not used in previous years (the bank accumulation started in 1995).

In 2004, The 2X cap was reached in four townships where strawberry fruit growers have transitioned to alternative fumigants. In one of these townships, growers were forced to use other fumigants on more than 500 acres despite having 2.8X the cap of Telone available. In 2005, between 50 and 80 percent of the strawberry acreage in two California townships will not be able to use their total amount of allocated Telone due to the township cap. As more growers transition to alternative fumigants, the township cap regulations will increasingly prevent growers in most of the production areas from fumigating with Telone. According to a study by Dr. Tom Trout, USDA-ARS, Fresno, California, strawberry production will face the largest impact from the Telone township cap, estimating that between 25–50 percent of the State's acreage will be affected by the cap.

(2) Field topography. Approximately 15 percent of California's strawberry fields are located on hillsides with slopes severe enough to make effective application of fumigants by drip irrigation difficult or impossible. In their transition to alternatives, hillside growers will need to broadcast apply alternative fumigants like Telone/chloropicrin or straight chloropicrin. This option is somewhat attractive because it fits into the current production practice of broadcast applying methyl bromide. However, neither alternative option provides sufficient savings on fumigation costs to offset increased weeding costs and reduced productivity. Costs are not the only hindrance growers face when their crews hand-weed in California. Because hand-weeding is such a contentious issue in the state, growers must be prepared to prove, upon state government request, their need to hand-weed.

Furthermore, County Agricultural Commissioners do not currently allow growers to broadcast fumigate with straight chloropicrin in Monterey and Santa Cruz Counties (two counties that contain 38 percent of the State's acreage) due to concerns that this would result in increased public complaints (most fumigation complaints are associated with chloropicrin). For broadcast applications of Telone, a main concern is the Telone township cap. However, broadcast applications use 30- 40 percent more fumigant than when applied by drip.

(3) Increased production costs in the northern production region. For the northern strawberry production region, applying fumigants by drip results in significant increases in the cost of growing strawberry fruit. With drip applied fumigants, the entire field and irrigation system must be set up before the field can be fumigated. This process requires an additional three to four weeks compared to the setup process for broadcast fumigation. This additional time causes problems for a majority of the producers in the northern district. The strawberry production season is adjacent to the planting season of many vegetable crops, so strawberry production fields are typically rotated with these crops (i.e. half the ranch is planted in strawberries and the other half is rotated out with vegetables each year). A typical production cycle for a field is strawberry (September 2004–November 2005) followed by two vegetable crops (November 2005–September 2006), then back to strawberry (September 2006–November 2007). The need for an additional 3–4 weeks to prepare a field for drip fumigation forces strawberry growers to take back the land from the rotation vegetable growers 3–4 weeks earlier. Normally, two vegetable crops can be produced between the strawberry rotations. However, by shortening the season 3–4 weeks early, only one vegetable crop can be produced instead of two. Land sub-lease rates to vegetable growers are approximately \$1,000 for one crop and \$1,800 for two (the land typically leases for \$2,200 for a full year). Therefore, strawberry

growers who switch to drip applied alternative fumigants lose \$800 in rent due to the loss of one of the two vegetable crops.

A second issue with the transition to drip applied fumigants in the north is the need to setup the entire irrigation system before fumigation. Currently, growers move most of their irrigation headers and other main line pipes over from the previous season's crop to the new crop after the end of the season (in November/December/January). However, with drip applied fumigants growers must have two sets of equipment, at an increased cost of approximately \$500/acre.

The strawberry grower's need for methyl bromide can be fulfilled, in the short term, through the Critical Use Exemption (CUE) process if it is allowed to function as it was designed. The United States Environmental Protection Agency (EPA) has done an excellent job of understanding our industry's continuing need for methyl bromide and the difficulties faced in the transition to alternatives. Throughout the Montreal Protocol process, the EPA submitted Critical Use Nominations (CUN's) to provide the industry with sufficient methyl bromide in the future so that strawberry growers can meet their critical needs. The EPA has also created reasonable regulations for the allocation of this critical use methyl bromide in 2005. There are aspects of the CUE process that need to be changed to allow continued availability of methyl bromide while our industry develops more suitable alternatives.

First, The EPA understands how difficult it is to shift basic research to applied principles, and that we need time to mitigate these hurdles. EPA dedicates considerable resources to evaluating industry recommendations prior to issuing its nomination to the Methyl Bromide Technical Options Committee (MBTOC). EPA's nomination should prevail over MBTOC's without further reduction by MBTOC.

Second, we ask the U.S. delegation and the Parties of the Montreal Protocol (Parties) to shift their focus from reducing the use of methyl bromide and other ozone depleting substances to managing the emissions of these substances and allowing for multi-year CUE's. By changing the focus of the CUE process from reducing the amount of methyl bromide used to managing emissions released, the strawberry industry could retain limited access to methyl bromide in the future. The EPA has recognized that this would be possible with the development of new technologies and innovative production practices that minimize emissions. Unfortunately, the current CUE process does not reward an industry for innovations that reduce emissions. Any process that growers might use to reduce the amount of methyl bromide needed to fumigate a field leads to a direct reduction in the amount that will be approved by MBTOC and the Parties in future CUE's. Additionally, unless the process is changed to focus on emission reduction, funding research into methods that may reduce emissions will be difficult. Emission management is the key to protecting the ozone layer. Continued access to and use of methyl bromide in the future is not incompatible with reduced emissions.

Halon 1211, a product that has had its production phased out by the Montreal Protocol, provides an example for emissions management. There are significant stockpiles of Halon 1211 that are gradually being emitted into the atmosphere because there are no incentives in place to destroy the product. By allowing methyl bromide users to buy and destroy stocks of Halon 1211 in exchange for the continued use of methyl bromide, overall emissions of ozone-depleting compounds could be reduced. Such a swap would provide the members of our industry the opportunity to continue using methyl bromide while reducing damage to the ozone layer. To move the focus to emissions, the U.S. delegation should ask the Parties to develop a plan for the use of a Halon swap to facilitate the continued use of methyl bromide in the future.

Third, the need to annually submit applications to the EPA and attend multiple Montreal Protocol meetings to explain and defend the industry's CUN presents yet another economic and technical burden for the California strawberry industry. We are asked to submit an application for critical use two years in the future, long before we know what our CUE approved amount is in the subsequent year. A multi-year critical use process would enable growers to better plan their transition to alternatives rather than being forced to wait for annual updates on the availability of methyl bromide. The phase-out process is hindered by uncertainty. It encourages growers to continue using as much methyl bromide as allowed since availability for future fumigation seasons is not certain. It is a matter of use it or lose it. We ask that the U.S. delegation support a multi-year CUE process that will enable the California strawberry industry's growers to efficiently plan their future use of fumigants.

Fourth, the U.S. delegation needs to continue to create a more open CUN review process where organizations like the Commission can directly address questions about their CUN with MBTOC during the review process. While the Commission has been able to meet with representatives of MBTOC on several occasions to dis-

cuss our CUN, these meetings were infrequent and always followed MBTOC's preliminary determination on the CUN. Additional meetings with MBTOC and TEAP should be arranged during MBTOC's review of the CUN's to allow updated information to be shared with the Committee and allow the Commission to answer questions about our CUN before MBTOC makes any recommendations.

It has only been through active participation in the CUE process, including attendance at overseas meetings, that the strawberry industry has found any success in achieving a positive outcome as it relates to the continued use of methyl bromide. Four fundamental changes in the CUE process, including requiring that EPA's nomination be accepted by MBTOC as received, shifting from methyl bromide usage to emissions management, taking a multi-year approach to the CUN process, and creating a more transparent CUN review process, would allow more rapid introduction of alternatives, reduce industry uncertainty, and remove the instance of further cumbersome burdens such as those experienced by the California strawberry industry in recent years.

STATEMENT OF DANIEL A. BOTTS

Chairman Lucas, Ranking Minority Member Holden, and Members of the Committee:

I am pleased to appear on behalf of the Crop Protection Coalition (CPC) and Florida Fruit & Vegetable Association (FFVA) to discuss the issues surrounding the Critical Use Exemption process for the important crop production tool methyl bromide. The membership of the Crop Protection Coalition comprises food and agricultural industries, including nurseries and horticultural industries, which rely on methyl bromide to produce, store, handle or ship foods or other agricultural products. Florida Fruit & Vegetable Association is a voluntary trade association that represents fresh fruit and vegetable producers in the state of Florida. Both of these organizations have assumed a direct role in tracking the complex and often difficult to comprehend regulatory developments associated with methyl bromide and the critical use exemption process. As several of my co-panel members are also members of the Crop Protection Coalition, I will focus my testimony on the experience of Florida Fruit & Vegetable Association in developing the critical use petitions for tomatoes, strawberries, eggplants, and peppers in Florida, and their subsequent review, both at the national level and through the international process employed by the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer.

The critical use exemption process is only one of the many facets of the complex interactions surrounding methyl bromide that have resulted from changing science, international review and decisions regarding an international treaty, and the interplay between two Federal laws, the U.S. Clean Air Act and the Federal Insecticide, Fungicide and Rodenticide Act. As an observer representing directly impacted parties, I have watched with interest as the negotiations took place to establish the critical use exemption process specifically for methyl bromide through an amendment to the Montreal Protocol, and development of the regulatory framework necessary for the U.S. Government to be able to respond to identified and scientifically justified needs in the international arena.

The international criteria, as described in Decision IX/6 by the Parties to the Montreal Protocol to implement the exemption process, while not prescriptive clearly defined the decision to be based on specific conditions. That decision requires a decision that: "no technically and economically feasible alternatives that are acceptable from the standpoint of environment and health and are suitable to the crops and circumstances of the nomination" prior to allowing a critical use exemption.

In order to collect the information necessary to meet these criteria the Environmental Protection Agency's Office of Air and Radiation developed, through a public process, the information to be collected and submitted to document the quantity of methyl bromide and sites of use that would qualify for critical use exemption. FFVA participated in the public process and while not totally satisfied with the final format and information requested, we felt that the information as required by the subsequent Federal Register Notices on Application for Critical Use Exemptions of Methyl Bromide (67 FR 31798, 68 FR 24737, 69 FR 25570), if judged fairly, would provide adequate information for both the national and international review.

To fully appreciate the efforts required and difficulty in determining the appropriate information to be supplied, each year's subsequent effort needs to be described:

2002 CRITICAL USE EXEMPTION APPLICATION CYCLE

The Federal Register Notice announcing the initial data collection effort was published in May of 2002 with a 120-day data collection and petition preparation period. The application was to cover the phase out of methyl bromide scheduled to begin on January 1, 2005. The forms associated with the application process allowed for a multiple year request (specifically asking for 2005, 2006 and 2007 acreages and quantities). The alternatives addressed were to come from the "official" list of potential alternatives described at the international level and further refined to reflect those products with registration in the United States. FFVA served as the petitioning agent for producers of tomatoes, strawberries, peppers and eggplant grown on plastic mulch that are marketed by handlers in the state of Florida. The information collection included the review of sponsored research specifically done to address the unique soil types and cropping patterns associated with these crops in Florida. These three petitions (eggplant and peppers were combined into a single petition) are archived in EPA's docket associated with this exemption process (OAR-2003-0017). FFVA staff required over 800 man-hours with an additional effort from the research community and growers of approximately 3,000 hrs to compile the information submitted in support of these three petitions. This initial effort was complicated by the lack of clear guidance from the international community as to the format and information to be included in the national Critical Use Nomination.

Florida Fruit and Vegetable Association had served as the coordination point in Florida for much of the research initiated in the early 1990's with the listing of methyl bromide as a regulated substance under the Montreal Protocol. Pre-plant fumigation is the foundation of the crop production utilizing plastic mulch culture. This practice was introduced in Florida in the early 1960's and within three years had been adopted by the majority of producers of vegetables on the sandy flatwoods soils of Florida. The introduction of methyl bromide as a pre-plant treatment shortly after the initial introduction of plastic mulch increased yields by a factor of three. While other nematicides and soil fumigants have been registered during the ensuing years the pre-plant treatment of choice has remained methyl bromide. The broad spectrum of control of multiple pests and the development of application techniques that allowed for in-bed fumigation contribute to the continued reliance on methyl bromide as the best choice for pre-plant soil fumigation under Florida conditions. The cooperative research program in Florida identified a next best alternative to methyl bromide that depends on multiple applications of a mixture of pesticides to deal with the spectrum of pests controlled by the single application of methyl bromide. During this period cultural practices and other means to reduce the use rate of methyl bromide were examined. These efforts suffered a set back after the first CUE petition had been filed as a result of the cancellation of the primary herbicide we had identified to be used to help suppress Purple and Yellow Nutsedge, the primary problematic weed species.

The more elusive information required in the petition process concerned the economic impacts of adoption of the alternatives at the individual farm level as required to determine the "economic feasibility" of adoption of near equivalent technically feasible alternatives. This was further complicated in Florida by the seasonality of production and the typical accounting periods utilized by growers in the state. Records are maintained for production seasons split across calendar years into a fall/winter/spring continuous cropping season. To provide the information as required on the OMB approved application forms a significant effort to reformat historical information into the required periodicity for completion was required. The practice of utilizing the same plastic mulch across multiple crops during a single production season also complicated the economic information data collection. This particular production practice is most common during the long growing seasons encountered in Florida. Most of the information collected at the national level on the impact of the regulatory phase out of methyl bromide prior to the CUE process was focused on the impact across the regional production industry and not on the individual farm enterprise unit.

After careful review of the above issues the resulting petitions submitted by FFVA requested critical use exemptions for the total production acreage of all four crops included in the petitions we submitted. The use rate requested was much lower than the maximum use rate allowed on the current labels for methyl bromide in the subject crops. The rate requested represented the minimum rate necessary under current cultural practices to achieve nutsedge control. The submission from FFVA to document the information requested was over 5,000 pages across the three petitions submitted. This information was submitted in September of 2002. This initiated the internal U.S. review for compilation of a National Critical Use Nomination to be submitted to the Ozone Secretariat of the United Nations Environmental Pro-

gramme, the administrative oversight body for the Montreal Protocol, by the end of January 2003. The UNEP review was to occur with a recommendation to the Parties for Approval at the 15th Meeting of the Parties to the Montreal Protocol in November of 2003.

While there were numerous contacts between the review teams for the individual petitions at the national level, the final decisions and sector allocations submitted for international review were not discussed formally prior to submission. The internal review and decision process for the amounts to be requested resulted in significant reductions in the specific quantities identified for the four Florida crops (30% reduction for tomatoes, 40% reduction for Strawberries, and 50% reductions for eggplant and peppers). FFVA requested and received a briefing by the Office of Pesticides Programs in cooperation with the State Department and the U.S. Department of Agriculture in March of 2003 to discuss our concerns and to offer our assistance in preparing any supplemental information that may be required as the international review took place. The U.S. CUN had consolidated the multiple individual petitions into sectors and further reduced the amount of information submitted to the international community for review. The U.S. Nomination had further consolidated the request into a single lump sum request for CUE approval at the international level.

While we did not totally agree with the treatment of the crops and quantities we had requested FFVA was generally supportive of the efforts of the Agencies as the nomination moved through the international review process. We were satisfied that the difference between the petitioned amount and the requested CUE quantities could be mitigated by the availability of methyl bromide manufactured prior to the January 1, 2005 phase out date. We were also comfortable that the U.S. Nomination fulfilled all of the requirements imposed by the Montreal Protocol and should move through the international review process as the standard by which other national nominations would be judged.

The international review process was extremely frustrating for those of us who had submitted petitions to the U.S. government. The international Technical Committees established by the UNEP Ozone Secretariat charged with review of National Critical Use Nominations, the Methyl Bromide Technical Options Committee (MBTOC) and the Technology and Economic Assessment Panel (TEAP), began their review in early April 2003 with the goal of providing recommendations to the Parties at the Open Ended Working Group of the Parties (OEWG) in July 2003. This process ran into complications almost immediately with most of the sectors identified in the U.S. Nomination being classified as unable to assess. This was attributed to the need for additional information to document the circumstances of the nominations for the specific crops and sites for which CUEs were nominated. This was even further complicated by the operating rules of the review committees and the lack of transparency in the international review process. The first chance many of the petitioners had to discuss their petitions with the leadership and representatives of MBTOC was through informal consultations in the hallways at the OEWG. This tremendous confusion and lack of consensus at the OEWG led to another meeting of MBTOC in September 2003 with a recommendation mandated for consideration at the 15th Meeting of the Parties in Nairobi, Kenya. The revised recommendations were circulated in October 2003 with many of the sectors still in a state of indecision. Much of the discussions at the 15th Meeting of the Parties centered on the Critical Use Nominations and in particular the perception by the European Community and many of the Article 5 nations that the U.S. Nomination was exceedingly large and needed to be reduced. The U.S. delegation at that meeting did an excellent job in support of the national request and as a result the First Extraordinary Meeting of the Parties was set for Montreal in March of 2004. MBTOC was directed to meet in January 2004 to resolve the outstanding issues and to come forward with specific recommendations for those categories that they had been unable to assess in previous reviews. The MBTOC supplemental report was issued on 14 February, 2004. The U.S. received recommendations for approval on all but a small portion of the initial amounts requested. While the decision was favorable the amounts of methyl bromide approved for production and consumption were limited and the remaining CUE approved methyl bromide in the United States were to be drawn from existing supplies. The Parties also adopted several decisions that impact future cycles of Critical Use Nominations. The Critical Use Nomination Handbook was revised with recommended forms for National Submissions and debate continued over the appropriate way to evaluate the economic feasibility of alternatives and the information necessary to document "the circumstances of the crop and site of use" as required in Decision IX/6.

2003 CRITICAL USE EXEMPTION APPLICATION CYCLE

The Federal Register Notice announcing the second round of applications for CUEs was published on May 8, 2003 with a 90-day period for data collection and submission. This application notice was based on the previous interpretation of the requirements under the international criteria. The 2002 international review period was in progress and the subsequent decisions of the parties governing CUN criteria and information needs had not been taken. The 2003 round of applications requested any supplemental information for 2005 CUEs and quantities requested for the 2006 and 2007 control periods. In Florida, FFVA consolidated its petition into a single submission covering the crops included in the three petitions submitted in 2002. While much of the petition was devoted to addressing the reductions taken by the U.S. from a regulatory perspective, the "best available alternative" identified for economic analysis purposes was changed to reflect the loss of the registration of Pebulate, the herbicide of choice. Additionally, in an effort to more accurately reflect the enterprise budgets for methyl bromide and proposed alternatives, a series of direct meeting with individual growers were held to update the enterprise budget information previously submitted. The petition and supporting information specific to the nomination are archive in the EPAs Docket (OAR-2003-0017). The information archive represents a portion of the petition submitted by FFVA with 431 of over 1800 pages included. The research reports that accompanied the petition were not docketed.

In an attempt to address concerns that had been raised during the international review, a session on the CUE process was held as part of the International Research Conference on Methyl Bromide Alternatives and Emissions Reduction in San Diego, November 2003. The U.S. review of petitions was completed in January with submission of the 2003 CUN to UNEP in February 2004. The second round of CUN's had to be delivered to UNEP prior to completion of the review and decisions on the initial 2005 petitions.

In regard to the specific crops included in the CUN based on FFVA's CUE petitions, FFVA was concerned that even though information was provided to document the need for additional methyl bromide based on the review criteria used in the 2002 round, the U.S. Nomination included a reduced amount for the crops than was included in the previous petition. FFVA was consulted in the period prior to submission of the 2003 Nomination and addressed the specific issues raised in the review. However, the quantities proposed were not increased.

This problem was further exacerbated as a result of the lack of direct input into the international review process. MBTOC was engaged in the additional review of the 2002 recommendations when the U.S. Nomination was being finalized and was able to meet with and tour the California production area. We requested the same courtesy from UNEP and MBTOC for the crops included in the Nomination on the east coast but this direct meeting has still not been held.

The initial review of MBTOC as published in its preliminary report to the Parties in June 2004 raised additional issues associated with their review of the U.S. Nomination and potential reductions in CUE quantities based on criteria that had not been discussed or decisions taken by the Parties. Most troubling in this respect was a total disregard for the regulatory processes in individual countries and the assumption that newly registered products or changes to existing registrations translated into expedited and immediate adoption at the field level. Several of the specific quantities of requested methyl bromide were proposed for reduction by MBTOC because technically feasible alternatives could be adopted. This was done based on individual members of MBTOC experiences in their countries that in many cases operate under different market forces and levels of input costs.

Additionally as part of the controversy that arose over the 2002 round of CUN's the operating parameters of MBTOC and the criteria associated with that review are in the process of being revised. While the reconstituted MBTOC will not be in place until the 2005 or 2006 review period, the Parties were directed to take the decisions of the Extraordinary Meeting of the Parties into consideration with the 2003 round of CUN's. The initial reviews as published in the TEAP report to the Parties for consideration at the 15th meeting of the Parties included significant cuts to the U.S. Nominations as a result of these criteria. The 15th meeting of the Parties considered the CUN recommendation and approved approximately 2 percent of additional CUEs for the U.S. in 2005, but did not include additional consumption or production for the 2005 control period. Action on the 2006 control period included approval of consumption and production at 29 percent of the 1991 baseline with another Extraordinary Meeting of the Parties scheduled for July 1, 2005 to consider approval of additional quantities. The U.S. government submitted detailed comments on January 31, 2005 support of the disputed quantities.

2004 CRITICAL USE EXEMPTION APPLICATION CYCLE

The Federal Register Notice announcing the 2004 application process for methyl bromide CUE's was published on May 7, 2004 (69 FR 25570) with a 90-day data collection and preparation period. Again FFVA submitted a petition covering the four crops included with its original CUE request. FFVA's 2004 petition reflected changes in acreage for peppers and tomatoes in the 2007 CUE request. Labeling changes related to worker protective equipment for applicators and early reentry for workers on 1,3-dichloropropene allowed us to return to the in-bed application of this product in the complex of alternatives required to achieve the "best available" alternative to methyl bromide. And even though several post emergent herbicide have been registered for use on purple and yellow nutsedge, application and plant back restrictions limit the utility of these products as a replacement for the pre-emergent applied pebulate. The changes in identified alternatives and shifts in primary pests in strawberry required significant additional information for this round of applications. FFVA's core application is found in the EPA Docket associated with this exemption process (OAR-2003-0017). The Docket contains the application and supporting document, bibliography of research and supporting economic information (1,018 pages). Copies of the supporting research documentation was not included in the Docket (800 pages).

Concerns of FFVA for this round of nominations remain the same as with the previous submission in 2003. Additional information to document the continued need and current status of efficacy trials of alternatives was included. In the opinion of the research and grower community, while we continue to improve the performance of the best available alternatives, we are not significantly advanced from where we were in 2002 and 2003.

FFVA is seriously concerned over the U.S. Critical Use Nomination as forwarded to UNEP on January 31, 2005. The sectors that include the four crops for which we submitted petitions are proposed for significant reductions in CUE quantities in 2007. We are facing reductions from the quantities requested by Florida of over 50 percent in some cases. In conversations with the U.S. reviewers as they finalized their analysis prior to submission of the petition to UNEP, reductions of this magnitude were not discussed.

As a result of the reductions proposed by the U.S. Nomination we are anticipating significant, and, in our opinion, non-justified reductions at the international level for the crops we represent.

OVERALL PROCESS ISSUES

Florida Fruit & Vegetable Association continues to have serious concerns over the process involved with the Critical Use Exemption process. While the international review continues to be the most frustrating, there are concerns over the domestic process as well. In the scope and magnitude of issues facing the United States and other in the international community methyl bromide does not reach the level of BSE or Soybean Rust, but as the cornerstone of production for our membership it is critically important. We will continue to be engaged in the process at all levels to ensure the needs and concerns of our membership are addressed.

At the international level, we would encourage continued high priority of this issue within the context of the Montreal Protocol. The U.S. State Department is to be commended for the position taken to ensure that criteria adopted by the Parties be consistently applied and scientifically reviewed. The international process needs to be opened up both during review, recommendation and decision formulation stages of the complex process. As outside observers and only having access to the published documents at the international level there appears to be a lack of consistency in the review process, with the U.S. being held to a much higher standard of data and justification of need as decisions are rendered. The composition and operating procedures of the Technical Review Committees of UNEP need to be fully open and transparent. The Ozone Secretariat should be held accountable to the standards the regulated community is subjected to in this country as the regulatory process is carried out. This would minimize the appearance of political considerations in the decision process.

At the domestic level, the overall process is somewhat limited by the time constraints and the decision points dictated by the international process. It is our opinion that the process of review that leads to the U.S. nomination needs to be more open and transparent with actions taken by the government to reduce requested quantities fully documented and discussed with the petitioners prior to finalization for submission to the international level.

FFVA appreciates the attention given to this issue by this committee as evidenced by the hearing today. We stand ready to work with you to see that the information and support needed to continue to address this issue are available.



**STATEMENT BEFORE THE
SUBCOMMITTEE ON CONSERVATION, CREDIT,
RURAL DEVELOPMENT, AND RESEARCH**

COMMITTEE ON AGRICULTURE

U.S. HOUSE OF REPRESENTATIVES

HEARING ON

**METHYL BROMIDE: ASSESSMENT OF THE
CRITICAL USE EXEMPTION PROCESS
UNDER THE MONTREAL PROTOCOL**

submitted by

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on behalf of the

**SOCIETY OF AMERICAN FLORISTS
AMERICAN NURSERY & LANDSCAPE ASSOCIATION
FLORIDA NURSERY, GROWERS & LANDSCAPE ASSOCIATION
CALIFORNIA CUT FLOWER COMMISSION**

March 10, 2005

Contact:

**Lin Schmale
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Chairman Lucas, Ranking Member Holden, 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 solve the problem. Congressmen Darrell Issa and Mark Foley gave up part of their Thanksgiving holidays to be with us at the international meeting of the parties last fall 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. EPA and State Department staff have worked diligently on behalf of the U.S. – facing some very grave political constraints. 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 Florida Nursery, Growers & Landscape Association (FNGLA) represents Florida's nursery and landscape industry, the largest-value crop industry in the state. Founded in 1952, FNGLA is the nation's largest state nursery/landscape association with nearly 2,400 member production nurseries, landscape firms, retail garden centers and horticultural suppliers.

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 MAY 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.

The U.S. 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 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.

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

The United States' end-users of methyl bromide are happy to live by the terms of the Montreal Protocol. However, the terms of the treaty that the U.S. signed are getting lost. It is necessary for the U.S. government to ensure that its agricultural community is protected under the Protocol terms our government signed. The treaty is becoming a "dynamic" treaty -- it literally is being changed outside the parties' approval process.

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. And although the U.S. State Department, the Department of Agriculture, and the Environmental Protection Agency are working diligently on behalf of U.S. growers, their voices are simply being ignored. 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. We believe that Congress must act to safeguard U.S. growers' rights, by passing the legislation introduced by Congressman George Radanovich. Only in this way can Congress tell the rest of the world that the U.S. *will* 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.

In November, 2004, 36 Members of Congress signed a letter to President Bush which stated:

"The Parties have decided to substantially reduce the amount of the American CUE nomination. It was done so without establishing a reliable scientific basis for such adjustment. The actual review time devoted by the United Nations Environment Program (UNEP), including its Advisory Committee, is negligible. However, that does not prevent the Parties from arbitrarily reducing the U.S. nomination amount.

"The CUE process under the Montreal Protocol is broken and we want to work with you to address this problem. We cannot continue to abide by a system in which subjective judgments by foreign governments determine whether the legitimate needs of our food and agriculture industries will be met." [emphasis added]

We are grateful to all of the Representatives who signed that letter, and for Representative George Radanovich's introduction of legislation which acts to safeguard U.S. growers' rights. 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.

III. 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 don't work, if in fact they do not, and the economic reasons why methyl bromide must continue to be used.
2. EPA reviews and as necessary supplements this information and ensures that the U.S. application is complete and accurate. EPA is exhaustive and very diligent in its reviews. It should be noted that U.S. applications are held up to other countries as providing excellent information and justification.

3. State Department submits the application in a timely fashion to the Secretariat for the Montreal Protocol.

4. The U.S. application and all other applications are reviewed by the "Methyl Bromide Technical Options Committee" (MTOC) and by the full "Technology and Economic Assessment Panel" (TEAP).

5. MTOC or TEAP may return to the U.S. for additional questions before making a recommendation to the full meeting of the parties.

6. Finally, and often after further negotiations behind closed doors, the full meeting of the parties votes on the application, giving great weight to the recommendations of MTOC and TEAP.

In the case of the ornamentals application, MTOC-TEAP determined that they were "unable to assess" it -- requiring further submissions and negotiations by the U.S. government. As a result, the entire ornamentals application for 2006 will be reviewed again, based on the supplemental information and application provided by the U.S., at the MTOC-TEAP meetings in April, preceding the Extraordinary Meeting of the parties scheduled for June, 2005.

For calendar year 2006, the U.S. nominated 37 percent of baseline (baseline is the amount used in 1991) for U.S. industries' total requests. As discussed in Section IV below, major political discussions and negotiations occurred during last fall's Prague meeting. As a result, the Parties approved 27 percent of the baseline nomination, and the remaining 10 percent will be assessed at a one-day Extraordinary meeting in conjunction with the Working Group in June, 2005.

In its 2007 nomination, the U.S. requests 29 percent of baseline -- a huge cut, which EPA says is "largely due to the introduction of alternatives in the marketplace." We are greatly concerned about this apparent downward trend, which we are discussing with EPA and which we will discuss later during this testimony. In November 2005, the Parties will meet and review the MTOC recommendations for 2007.

IV. THE CUE PROCESS, WHICH IS SUPPOSED TO BE BASED ON SOUND SCIENCE, IS INSTEAD BASED ON INTERNATIONAL POLITICS. IT IS POLITICALLY, NOT SCIENTIFICALLY, DRIVEN. THE "RULES" AT THE INTERNATIONAL LEVEL ARE NOT TRANSPARENT, NOT WELL-DEFINED, AND ARE ACTUALLY REDEFINING THE MONTREAL PROTOCOL -- WITHOUT OFFICIAL AGREEMENT OR OVERSIGHT BY THE SIGNATORY NATIONS.

A. The MTOC/TEAP Recommendations

The battle lines formed early, in Prague at the Thanksgiving, 2004, Meeting of the Parties. In fact, they formed well before Prague. 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 TEAP proposed. She said:

"We were surprised to find that the TEAP and its subsidiary body, the Methyl Bromide Technical Options Committee (MTOC), took what appears to be an arbitrary approach in making recommendations for 2006 CUE requests.... The MTOC/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 response? The official Report of the Prague meeting states:

"The co-chair of the Methyl Bromide Technical Options Committee [MBTOC] reported that the Committee had indeed imposed reductions in cases in which methyl bromide alternatives were available and there was no evidence of efforts to use them. Although in a number of cases the reduction amounted to 20 per cent, he assured the meeting that the committee did evaluate nominations individually and on their own merits." [Report, page 14, item 101]

However, despite those not-very-reassuring "assurances," no hard and fast data on the Committee's decisionmaking process were provided. MBTOC and TEAP conduct their reviews and decisionmaking in private, and do not give us any clue as to why they are making the reductions they are making.

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 – it is based on MBTOC's desire to simplify the process. The U.S. has provided detailed information on why certain alternatives available to third-world farmers 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 provide open access to the bases 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. Furthermore, under the current process no appeal is allowed. This practice clearly violates a scientific norm of question-and-answer and opportunity to rebut incorrect assumptions. U.S. industries are treated as "guilty until proven innocent" -- which is surely contrary to our rule of law.

B. The rumor that the U.S. simply requested "too much" methyl bromide is not relevant, although it is running the decision.

At the Prague meetings, several developing nations, the EU, and U.S. environmental organizations spent significant amounts of time and energy putting pressure on MBTOC and the voting parties to force the U.S. to take arbitrary cuts, merely based on the fact that the U.S. "requested more methyl bromide than any other country." The discussions at the meetings suggested a 30 percent arbitrary cut for the U.S.

The terms of the Protocol require an applicant to show that it has searched for alternatives but that no technically feasible or economic alternatives exist. Of the 13 countries that submitted applications, the U.S. does have the largest request. The 24 commodities represented in the U.S. requests supplied sophisticated applications, detailed data justifying their requests, and demonstrated that alternatives currently do not exist although research continues.

C. The negotiations at the Meeting of the Parties (for example, last fall in Prague) are political, not science-based.

When questioned what its scientific reasoning was, MBTOC assured the U.S. that all scientific reasoning was used. When pressured, MBTOC stated that its decisions are conducted behind closed doors and no such justification is required to be given!

As noted above, the U.S. had nominated 37 percent of our 1991 baseline for the CUE uses. The E.U., particularly, supported by various other nations, were strongly arguing that the U.S. proposal should be reduced to 27 percent of baseline – overall. This reduction is simply because these countries' agenda is to phase out all methyl bromide – even the CUE amounts. An across-the-board CUE reduction has no basis either in the treaty or in science.

Let me paint one picture for you of that meeting.

On the first day, the U.S. and E.U. official representatives (accompanied by three or four other countries' representatives) were sent into a side room, behind closed doors, to negotiate whether or not the U.S. should be allowed 37 percent, per its well-documented and scientifically justified request – or whether it should be arbitrarily reduced another 10 percent, to 27 percent of its baseline nomination!

The U.S. and E.U. spent four and one-half days of the five-day meeting behind closed doors negotiating this impasse. The U.S. State Department fought valiantly. We, as industry, were not allowed into the room. However, U.S. Congressional staff who were attending the meeting (not all of whom support our position), were allowed to participate. Thus, we, as industry, spent many, many hours sitting outside that room – while Congressional staff would race out to ask whether or not a specific negotiation point would “work” for U.S. industry. We would explain, as well as we could, to staff – and they would return to the closed negotiations with any information we could provide to help the U.S. government argue on our behalf.

Finally, in the final hour, the U.S. was forced to accept a compromise: the Parties approved the U.S. nomination at 27 percent of baseline, and the remaining 10 percent will be assessed at a one-day Extraordinary Meeting in June, 2005. Will our voices be heard during that June meeting? Or will, once again, all decisions be made behind closed doors while the U.S. industry, its very survival at stake, sits outside the room?

It is worth noting that there are 180 parties to the Protocol – yet this decision was negotiated basically between the U.S. and the E.U. – the 178 other parties then simply accepted it.

V. WHY THE CUE PROCESS IS NOT WORKING

Obviously, several major problems are acting against U.S. interests with the U.N. body responsible for implementing the Montreal Protocol.

A. U.S. CUE science-based applications are second-guessed at the international level, with no rationale being given. Decisions are made behind closed-doors, with no accountability, scientific justification, or opportunity for appeal.

U.S. ornamentals growers joined together to file a joint application for the years 2005 and 2006. That application, which included about 100 pages of scientific data, was based on research reported in hundreds of refereed papers, and included as much information about growers' current needs and potential economic losses as was possible to obtain. It was prepared by Dr. Ann Chase, Professor Emeritus at the University of Florida, and Dr. Clyde Elmore, Professor Emeritus at the University of California -- active, fully-promoted scientists, at mid- to top-career. It is, in short, the best scholarly and most accurate application our industry could prepare.

EPA professionals worked diligently and at great length to ensure that the U.S. commodities' applications, including that of U.S. ornamentals growers, were accurate and complied with the terms of the Protocol.

The U.S. ornamentals application clearly demonstrated all that is required by the treaty: that we have tried to find alternatives, but that no practicable or economical alternatives are available and that, therefore, growers must rely on methyl bromide. Therefore, U.S. growers are entitled to the scientifically justified amount requested. MBTOC has not given any scientific reasoning for its "inability to assess" (a de facto 100% cut, at this point) the US ornamentals industry's application.

Note that countries such as Italy, Spain, and even Israel did receive allocations for cut flowers. Unlike most other U.S. industries -- *and unlike our international competitors, whose much-less-complete applications appear to have been granted without question* -- the U.S. ornamentals industry, almost through the 1st quarter of 2005, is completely in doubt about whether our 2006 request will be met.

MBTOC came back to EPA with a series of questions which very clearly indicate that they either cannot, or do not want to, understand the complexity of the flower industry. Since several members of MBTOC had actually toured our farm, along with others in California, they should have a clear idea of the complexity of growing operations and of why our industry finds it difficult to submit an application that provides boilerplate, "one-size-fits-all" information of the huge variety of crops and diversity of planting times, locations, and pest problems for each. Therefore, we can only assume that the more information we provide them, the more questions MBTOC will ask -- not because of their desire for clearer science, but because of their desire to find reasons to cut or even reject our application.

EPA came back to our industry for help in answering MBTOC's questions. The U.S. has now included another amplified version of our request in its submission to MBTOC. The MBTOC/TEAP are supposed to be meeting in April to determine the fate of the ornamentals industry's 2006 application. Apparently, based on their recommendation, the U.S. State Department will be given the opportunity to argue on our behalf at the "Extraordinary Meeting" of the parties. We are very, very, very worried about the potential outcome, based on previous experience with this "process."

Perhaps the most troublesome aspect of this whole story is that our competitors in other countries, who, we understand, submitted much less complete and detailed nominations, were granted their requests without further questions during the Fall, 2004 Prague meeting. And our major competitors in third-world countries will continue to have methyl bromide available for their usage 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 effective production tools.

B. The CUE process as currently outlined and administered is unnecessarily burdensome, both on U.S. growers and on the U.S. government. U.S. efforts to implement a multi-year CUE process have been unsuccessful.

As can be seen from the above discussion, the application process as complied with by the U.S. is extremely burdensome and complex. Hundreds of hours of both industry and government time are spent in collecting and analyzing information. It is impossible to determine whether or not MBTOC and TEAP even consider all of the information submitted – in fact, it would strongly appear that they do not.

The CUE process must be repeated *every year* – presumably, because someone hopes that every year will bring new alternatives which will result in great reductions in our need for methyl bromide.

Complying with the process is extremely burdensome for U.S. industry and EPA. It is expensive and time-consuming. And, of course, the decisions at the international level appear to be made not on the applications, anyway, but on a predetermined agenda.

The application process must move to a multi-year process.

C. U.S. nominations are well thought-out and, in fact, are held up as examples for other nations. Yet our requests are cut, while our competitors in other countries are approved.

The U.S. applications are widely regarded as being the most complete and detailed of those of any of the other countries. Yet the more information that the U.S. supplies, the more it is questioned, challenged, and undermined by the arbitrary and non-science-based agendas of our competitors.

On the contrary, however, those same countries who are told to improve the quality of their applications by emulating the U.S. are *receiving* large allocations of methyl bromide.

The Parties recognized inconsistencies, saying:

"When MBTOC makes differentiated recommendations on nominations that cover the same use, it should clearly explain why one country's nomination is being treated differently than the nominations of other countries ... thus eliminating unjustified inconsistencies in assessments and ensuring equal treatment of nominations." [Report, page 79, Item 7.33]

Without knowing the bases on which a country's application was submitted, it is difficult to compare. However, Israel, just as an example, requested and received 77 metric tons for its cut flowers (open field) sector in 2005, and requested and received 67 metric tons for 2006. For "protected" cut flowers, Israel requested 303 metric tons for 2006, and MBTOC cut the recommendation to 240 metric tons, suggesting "a reduction of 20% for the 2006 CUN ... to allow for orderly phasein of alternatives." Note that the entire U.S. ornamentals application, which is still considered "unable to assess" is for only 162.817 metric tons. – about half of the total received by Israel in 2006. Italy's nomination for protected cut flowers-bulbs of 250 metric tons was reduced by MBTOC to 187 metric tons – still more than the entire U.S. ornamentals application. [TEAP Report, October, 2004]

D. Decisions appear to defer to the idea that CUEs should decline over a period of years until they reach zero. The Montreal Protocol does not in any way justify that concept or goal.

The bottom line at Prague was that the U.S. finally was forced into a compromise for the 2006 nominations. The compromise which the U.S. was finally forced to accept: 27% of baseline for 2006, and a chance to argue further at an "Extraordinary Meeting of the Parties" before this summer's meeting in Montreal. In other words, we still have to argue, even with the thousands of pages of well-researched information we have given the international body, for that additional 10%.

Why? Because 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. Participants in the Science symposium noted, for example, that

"... there was a risk that the gains achieved to date in the reduction of methyl bromide might be negated by increases in emissions from exempted uses, including quarantine, pre-shipment and critical use...."

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...."

"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 where MBTOC recognized existing technically feasible alternatives were available...In instances where technically feasible alternatives were available, MBTOC typically suggested a 10-20% reduction factor...." [TEAP Report, October 2004, page 10, emphasis supplied]

MBTOC is, based on its decision that existing alternatives are available, imposing a 10-20% reduction factor! The parties' CUEs specifically say whether or not existing alternatives are available, and what they are doing to implement them. Yet MBTOC, in addition to the party's own reduction efforts, is imposing its judgment as to whether or not alternatives are available, and imposing that 10-20% reduction factor.

Several of the parties vigorously objected to this practice during the meeting, and the Report of the Prague meeting 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.

Our industry, and the U.S. government, have spent hundreds of thousands of dollars on research for methyl bromide alternatives over the past 20 years -- yet *no* alternative has yet been found which will allow growers to economically and practically replace the use of methyl bromide in their

complex and ever-changing growing operations. Thus, under the terms of the Montreal Protocol, we must still be allowed to use methyl bromide. A "decline" in CUEs is not required by the Treaty.

E. Specific concepts concerning the elimination of emissions and the use of carryover stocks must be carefully examined and dealt with.

It is worrisome that some continue to argue that nations' allocations should be reduced by any methyl bromide stocks that the party might have on hand. That concept is not contained in the Treaty, and the U.S. must continue to argue strongly against its attempted introduction.

Similarly, we would suggest that since the intent of the Treaty is to reduce or eliminate emissions, then if it can be shown that by use of cover films or tarping, emissions are being reduced, methyl bromide should continue to be allowed.

VI. CONCLUSION

The discussion and stated agenda at the international meetings 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.*

Two examples:

Europe. Several northern European countries have banned the use of methyl bromide. Thus, crops which still require methyl bromide have moved into southern Europe or into third-world countries. Even if the product is produced in a third-world country on a farm owned, from a distance, by a European company, that third-world country can continue to use methyl bromide until 2015. Thus, the U.S. grower *who wants to keep production in the U.S.* is at a competitive disadvantage. Northern European countries are arguing vigorously against U.S. applications for methyl bromide use -- based, in many cases, on their own ability to obtain a competitive advantage by doing so.

China: China is on record as being in favor of banning the production of methyl bromide. It should be noted that China is also moving toward becoming a major producer of horticultural crops *and* of methyl bromide.

The U.S. industry has fulfilled the terms of the Montreal Protocol. It is in compliance.

The fact is that decisions are apparently being made by the international treaty body, not based on the complexity of our industry or on the full information we have provided in the CUE application, but on a predetermined goal of "getting us to zero use." Getting U.S. agriculture to "zero use" is not required by the Montreal Protocol. All that compliance with this treaty requires is that the industry be without economic and practical alternatives.

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

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

STATEMENT
of
DOW AGROSCIENCES LLC

HOUSE COMMITTEE ON AGRICULTURE
SUBCOMMITTEE ON CONSERVATION, CREDIT, RURAL
DEVELOPMENT AND RESEARCH

REVIEW OF THE METHYL BROMIDE
CRITICAL USE EXEMPTION PROCESS
UNDER THE MONTREAL PROTOCOL

March 10, 2005

Introduction

Dow AgroSciences (DAS) is a major U.S.-based developer and supplier of agricultural chemicals and biotechnology products in the agricultural industry with experience and expertise in the pre-plant, post-harvest and structural fumigation segments. We manufacture technically and economically feasible alternatives to methyl bromide (MB). DAS thanks the Subcommittee and would like to express our appreciation for the opportunity to provide comments on this important topic.

Among the extensive and diverse mix of products registered and produced by DAS 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 prior to the scheduled phaseout of MB. They are currently used for pre-plant soil fumigation and space fumigation to protect crops, food commodities and structures from a variety of unwanted pests. The DAS fumigant products (Telone[®] II, Telone C-17, Telone C-35, Telone EC, InLine[®] and Curfew[®] containing 1,3-D and Vikane[®] gas fumigant and ProFume[®] gas fumigant containing SF) are all currently used in a wide variety of applications as alternatives to MB in many of the sectors in which critical use exemptions (CUEs) are proposed (Table 1).

Table 1: Alternative Availability by Sector

Allocation Sector	2005 US CUE Volume (MB kg)	DAS Alternative	Are DAS Alternatives Presently Used for Sector?	Technically Feasible	Economically Feasible
Chrysanthemum cuttings – rose plants	29,412	1,3-D ¹	Yes	Yes	Yes
Cucurbits – field	1,187,800	1,3-D ¹	Yes	Yes	Yes
Dried fruit, beans and nuts	86,753	SF ²	Yes: Fruit and Nuts	Yes: Dried Fruit and Nuts	Yes: Dried Fruit and Nuts
Eggplant – field	73,560	1,3-D ¹	Yes	Yes	Yes
Forest nursery seedlings	192,515	1,3-D ¹	Yes	Yes	Yes
Fruit tree nurseries	45,800	1,3-D ¹	Yes	Yes	Yes
Ginger production – field	9,200	1,3-D ¹	Yes	Yes	Yes
Mills and processors	483,000	SF ²	Yes: Mills	Yes: Mills	Yes: Mills
Orchard replant	706,176	1,3-D ¹	Yes	Yes	Yes
Peppers – field	1,085,300	1,3-D ¹	Yes	Yes	Yes
Smokehouse ham – (building and product)	907	None	No	No	No
Strawberry fruit – field	1,833,846	1,3-D ¹	Yes	Yes	Yes
Strawberry runners	54,988	1,3-D ¹	Yes	Yes	Yes
Sweet potato – field	80,830	1,3-D ¹	Yes	Yes	Yes
Tomato – field	2,865,300	1,3-D ¹	Yes	Yes	Yes
Turfgrass	206,827	1,3-D ¹	Yes	Yes	Yes
Total	8,942,214				

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

The addition of methyl bromide as an ozone depleting substance by the Copenhagen Amendments to the Montreal Protocol sparked the need for development of new fumigants and use patterns. This provided the opportunity for DAS to step up and 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 phase-out of MB. Encouraged by the leadership demonstrated by the United States in the phase-out of other ozone depleting substances, DAS has invested over \$150 million in an intensive development effort to commercialize new products based on 1,3-D and SF that will meet anticipated U.S. needs for products that could be replacements for MB.

DAS recognizes that 1,3-D and SF products cannot serve as replacements for all the MB that is currently used and exempted from phase-out in the United States. The U.S. has made good progress in the reduction of MB and other ODS compounds. The support, development and refinement of MB alternatives by DAS and other alternative producers puts the U.S. in a good position to reduce dependence on MB further through judicious approval of CUNs, widespread utilization of existing stocks for CUEs and limitation on production to only the portion of the MB amount approved for CUEs by UNEP for the period 2005-2007.

Critical Use Exemption (CUE) Process

The decade-long effort by DAS to develop alternatives to MB has led our company to have a high level of interest in the U.S. Critical Use Exemption (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. CUNs for 2005, 2006 and 2007 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. CUE 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. Outlined below are comments with respect to the U.S. CUE process and the feasibility of DAS products as viable alternatives.

1. Lack of a Comprehensive Process

a. MB Petitioners

The 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 Alternative Producers

The CUE process is lengthy annual process that extends from the formal requesting 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. DAS is the leading world producer of alternatives and we have been frustrated at the lack of acceptance, and in some cases, rejection of our efforts. For example, in 2004 we submitted detailed comments in response to the 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 January 2005 CUN submitted by the EPA for 2007 CUEs did not utilize the information about the DAS alternatives.

c. Transparency of CUE Process

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.

d. Recognition of Current Information

Another unfortunate element of the CUE process that is a deterrent to developing interest in alternatives is the extensive lag between data and requests submitted and the corresponding CUE use. The changing status of alternatives during the two years following approval is not considered. Therefore, provisions are needed for ongoing evaluation of critical needs in light of the constantly changing and dynamic marketplace conditions for MB alternatives. The transition to MB alternatives is needlessly extended by not instituting a mechanism to restrict CUE allocation of MB after CUNs are approved that would take into consideration changing circumstances around alternatives (e.g., new registrations). This time lag encourages petitioners to continue their dependence on MB as opposed to considering alternatives that have become available following the date of their original CUE petition.

2. Inconsistent Data Quality Requirements

There are no consistent standards for data quality. Anecdotal opinions expressed as “expert judgment” are deemed acceptable if they are brought forward by the CUE petitioners. Statements and requests are deemed factual by default and often put the alternative producer on the defensive from the start. Conversely for alternatives, negative information conveyed by the CUE petitioner is not confirmed nor is additional information sought. Alternative producers are not considered stakeholders. When information is brought forward by the alternative producers, detailed and documented scientific data are required and information is to be objective and independent. Following that, the submission of such positive information is often viewed as “biased” or “self-serving”.

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, DAS has experienced a number of instances in the market place in which our products were intentionally not used or not considered for trial. Often DAS 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.

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 market place. The CUE process should include some incentive for MB users to try and subsequently adopt alternatives.

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 DAS, this delay of implementation and transition to alternatives also delayed the ability to generate a return on their significant investments. In addition, this delay has resulted in additional direct resources of time and money to continue repetitive research and delayed interest in and adoption of alternatives.

Under the current process, 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 that promote 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.

Feasibility of Alternatives

To date DAS has invested over \$150 million in a concerted effort to commercialize viable alternatives to MB and to succeed in addressing 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 re-registration process (completed in 1993 and 1998 for SF and 1,3-D respectively). In addition, DAS has developed new and improved application techniques and new formulations. We have provided substantial investments towards enhancing production facilities to supply the anticipated demand for both 1,3-D and SF. This includes the planning and construction of a new world-scale SF production facility for ensuring adequate supply for the global demand in the post-harvest fumigation markets.

Any difference between an alternative and MB (e.g. economic, direction for use, etc.) is reason to discount the alternative. To illustrate the lack of acceptance of a viable MB alternative in the CUE/CUN process is the following example:

Specific Example of CUN without regard to Alternative: ProFume® Performance and Cost Effectiveness

Scientific data demonstrates that SF is toxic to all species and controls all life stages of stored product insect pests. Research and product development efforts with ProFume® throughout the world have established a considerable body of knowledge about the technical efficacy of ProFume® for various stored product pests, under various conditions of temperature and other fumigation factors (Source: Marcott, Michelle. 2004. EPA Case Study – Alternatives to Methyl Bromide for Post-harvest Application. Under review by EPA).

A recent example are studies conducted by Dr. James Campbell of the USDA Agricultural Research Service which concluded that the typical use rate of ProFume® in commercial settings yielded a higher overall percentage of pest reduction than did MB at its normal use rate (Source: Campbell J. and S. K. Prabhakaran. 2004. Flour mill fumigations: Action thresholds, efficacy and rebound. Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reduction. Orlando, FL. Oct 31- Nov 3. www.mbao.org).

It is recognized in the 2007 CUN that moderate to high pest pressure and pests in older food processing facilities, especially those constructed of wood, experience more frequent and severe pest infestations and must be controlled by fumigation. Yet, there is no recognition that ProFume® can serve in this capacity. In addition, the CUN fails to provide any support of a viable alternative with additional comments such as: *"Efficacy of this chemical [SF] remains to be demonstrated in the field.....U.S. EPA currently has limited data on SF's performance relative to MB. We have little product performance data (direct comparisons to MB), no experience in how well it performs in different facilities and climates over multiple years....The U.S. nomination is only for those facilities where the use of alternatives is not suitable....the efficacy of alternatives may*

not be comparable to MB, making these alternatives technically or economically infeasible....."

Over 100 commercial scale applications of ProFume® have been made in mills and food processing facilities in several countries since 1997 when development efforts began. Successful fumigations have occurred in mills in the U.S., Canada, Switzerland, the UK, Italy, Germany and France. Since the first U.S. commercial launch of ProFume® in April, 2004, over 40 cereal grain facilities have been successfully fumigated with ProFume® in the United States.

Economic viability is another key measure for alternatives. Generally, cost differences have been represented as a hurdle for adoption of alternatives. However, when the total cost of fumigation is taken into consideration (labor, materials and fumigator profit) it is calculated that the use of ProFume® for control of pests in wheat mills results in an average 8 percent increase in the overall cost of fumigation to the miller vs. current MB pricing. Further, it has been estimated that the net impact per ton of flour of switching from MB to ProFume® is insignificant and that the impact on the cost of a loaf of bread is negligible (Source: J. Boye, J. and Muck, O. 2004. Proceedings of the Fifth International Conference on Alternatives to Methyl Bromide, Lisbon, Portugal.).

Attached are copies of letters from industry leaders that further support ProFume® as a viable MB alternative and a press release characterizing the first year results of ProFume.

Finally, EPA stated in its December 2004 MB allocation rule that a compound could not be considered an effective replacement until it had been used 5 times in an application. There is no technical basis for this statement. The body of information collected to date, as outlined above, would suggest that ProFume® is both economically and technologically effective as a MB alternative. Based on supporting data, available studies, and experience, we believe that it is technically and economically feasible in 2005 to displace approximately 40% of the 8.9 million kgs of CUEs for MB with available substitutes. However, from a practical transition perspective, this reduction will not easily happen in the next year. Appropriate controls and incentives would need to be incorporated into this rule to allow a practical replacement over the next few years. In addition, EPA should adopt a requirement to demonstrate utilization of alternatives in order to qualify for CUEs.

Transition Timelines

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.

In contrast, the current U.S. MB CUE process suggests that the transition towards alternatives to MB is to begin now. The CUE process discounts the work done in advance of the MB phaseout and ignores the work that was conducted by grower groups, IR-4, USDA and private industry that has prepared U.S. agriculture for this transition. To support the notion that the transition timeline is in front of us, the U.S. cites varying reasons why additional time is necessary. These examples range from 3 years to 5 years, and have recently been augmented by the U.S. EPA with new, vaguer "time" criteria that appear arbitrary. These new criteria and explanations include:

- *"it must be emphasized that such replacement, if feasible, will only occur gradually over time"*
- *"USEPA believes that within four years SF may be able to replace MB in 75% of the rice and flour mills"*
- *"a specific alternative may take up to 5 fumigation cycles of use before efficacy can be determined in the specific circumstances of the user"*
- *"This would mean that several repeat fumigations would be needed before determining the technical feasibility of an alternative."*

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.

Private Industry Investment in MB Alternatives

We recognize that the U.S. 2007 CUN is a marked reduction from the 2005 CUN that was submitted three years ago. Nevertheless, a nomination that is 29% 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 29% CUN level for 2007 would represent merely a 1% reduction in the amount of MB that has been allowed to be produced each year during the five year period from 2003 to 2007 and, as a result, remains virtually unchanged for the three year period after it was intended to be zero.

Several companies have made significant investments in MB alternatives in anticipation of the MB phase-out. These companies are not fairly represented in this process. To date DAS has invested over \$150 million in a concerted effort to commercialize viable

alternatives to MB and to succeed in addressing 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 re-registration process (completed in 1993 and 1998 for SF and 1,3-D respectively). In addition DAS has developed new and improved application techniques and new formulations. We have provided substantial investments towards enhancing production facilities to supply the anticipated demand for 1,3-D and SF. This includes the planning and construction of a new world scale SF production facility expected to become operational in 2006 for ensuring adequate supply for the global demand in the post-harvest fumigation markets.

We believe it is necessary for the U.S. to implement a CUE process that provides for the orderly transition to alternatives that designates a clear direction and definite timeline. Without this, there is a clear signal to us as a developer of alternatives that the return on our investments of \$150 million represents an untenable financial proposition.

Summary

The phase-out of MB as an (ODS) by the Copenhagen Amendment to the Montreal Protocol was ratified by the U.S. in 1994. DAS, a division of The Dow Chemical Company, responded to the ratification to meet the global need for viable alternatives to MB in all fumigation markets with an expanded development of SF and 1,3-D to fill the void resulting from the phase-out of MB. Encouraged by the leadership demonstrated by the U.S. in the phase-out of other ODSs, DAS invested in an intensive program to rapidly develop, register and produce these new products as viable alternatives.

The U.S. initially scheduled the phase-out of MB for 2001 then later delayed until 2005. For DAS, with significant investments in alternative to MB, this also delayed the generation of return on our investments. We have committed over \$150 million to date in both SF and 1,3-D as viable alternatives to MB in the U.S. This investment includes product development, production capital and regulatory costs. DAS is making a substantial investment in the construction of a new world-scale SF production facility to supply the anticipated demand in the post-harvest fumigation market. Continued delay in MB phase-out via the current U.S. CUE process has caused a reevaluation of the investment in the MB alternatives.

The reduction in MB use, more rapid than the 2007 CUN, 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. 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. 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.

**Additional Comments provided for the record by DowAgrosciences
Questions raised during the hearing**

1. **As the manufacturer, what is your view of the statement that ProFume cannot be used in Congressman Holden's district?**

ProFume® is registered and suitable for use in Pennsylvania grain mills throughout the year. In fact, ProFume is registered in 47 states for use in grain mills and grain storage uses as an alternative to MB. Registrations in CA and NY are expected soon. In addition, a decision from the USEPA on the additional "food processing" registration for ProFume is expected during May 2005. Unfortunately, as it is presently designed, the current U.S. methyl bromide CUE process will not acknowledge these significant regulatory advancements until 2008 at the earliest.

2. **Is ProFume really 4 times more costly than methyl bromide? It was stated that a methyl bromide fumigation costing \$10,000 would cost \$40,000 for a similar fumigation using ProFume – how can this alternative be economically viable?**

While we do not set the price of what fumigators charge, it is unreasonable that a cost difference of \$30,000 would exist between a MB fumigations and a ProFume fumigation. As indicated in the U.S. CUN, the only real cost difference between a MB fumigation and a ProFume fumigation is the cost of the product. Labor, operational costs and profit are fundamentally the same.

ProFume was used to fumigate approximately 10% of the U.S. grain mills during 2004. In this experience, the average cost of these ProFume fumigations was nominally 8% greater than what it would have cost the miller to use methyl bromide. If \$10,000 is a typical cost to fumigate a grain mill with methyl bromide, a corresponding cost to fumigate with ProFume would be approximately ~\$11,000.

3. **Concerns were raised about the environmental impact of some alternatives--especially halogenated alternatives. What is the environmental impact associated with the methyl bromide alternatives you produce?**

Unlike MB, Telone® products and ProFume have been determined not to be "Ozone Depleting Substances". In fact, Dow AgroSciences was named a recipient of the "Stratospheric Ozone Protection Award" by the U.S. EPA in 2002 for our efforts to develop these products as alternatives to methyl bromide.

It is important to note that the U.S. EPA has determined through their FIFRA re-registration and FQPA reassessment processes that these products do not result in adverse affects to the environment when used according to label directions. The

U.S. EPA has not yet made this determination for MB. MB is presently going through these U.S. EPA reevaluation processes.



The Alliance
for Responsible Atmospheric Policy

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March 21, 2005

The Honorable Frank Lucas
Chairman, Subcommittee on Conservation, Credit, Rural Development
House Committee on Agriculture
House of Representatives
Washington, DC 20515

Re: Fluorocarbon Industry Response to Hearing on Methyl Bromide Critical Use
Exemption to the Montreal Protocol

Dear Chairman Lucas:

I am writing on behalf of the Alliance for Responsible Atmospheric Policy (Alliance), an industry coalition representing chemical producers of hydrochlorofluorocarbon (HCFC) alternatives to ozone depleting compounds, and manufacturers of air conditioners, refrigeration equipment, motor vehicles, foam insulation, and fire extinguishers using HCFCs (see attached list), to state our concerns on issues related to the Montreal Protocol and methyl bromide.

We are concerned about the dialogue at the March 10 hearing that urged Congressional support for legislation to amend the Clean Air Act to allow production of methyl bromide in excess of limits imposed by the Montreal Protocol. Such legislation would put the United States out of compliance with the Protocol and jeopardize nearly \$10 billion in HCFC trade annually. At the most recent 16th Meeting of the Parties to the Montreal Protocol, a decision on the methyl bromide exemption was deferred until an extraordinary session to be held July 1. We urge the Congress to let the treaty process run its course, as it has successfully since 1987, and not take steps in advance to signal noncompliance with the Protocol. Premature action on this matter could result in costs to American industry and employers far beyond the entire cost of the 20-year effort to protect the ozone layer.

As you know, U.S. businesses have invested billions of dollars to comply with U.S. law and the Protocol's requirements to phase out the production of ozone-depleting compounds such as chlorofluorocarbons (CFCs). HCFCs are one of the many beneficial alternatives to CFCs, but are controlled under the Protocol because they have a small amount of ozone depletion potential.

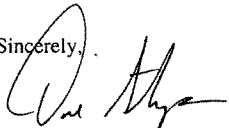
Enactment by Congress of any law allowing production of methyl bromide in excess of the Protocol's limits will place the U.S. in noncompliance with the treaty. Parties to the Protocol have the opportunity to impose sanctions on noncomplying parties or on trading partners of nonparties. As a result, the parties to the Protocol could impose sanctions on the countries that export to or import from the U.S.

Such sanctions could impact all HCFC chemicals and products containing HCFCs imported into or exported from the US. The potential repercussions are tremendous for many businesses. Imports of certain bulk HCFCs are used to make foam insulation and are used in air conditioners, for example. The U.S. would not be able to make those products for domestic use or export. In addition, bulk HCFC chemicals and products containing HCFCs are exported in great quantities from the U.S. Clearly, such restrictions on imports and exports would harm U.S. business and the economy. Furthermore, and ironically, sanctions could also include the ban on the export or import of crops treated with methyl bromide. Such trade bans could harm the agricultural community more than a U.S. agreement to accept a critical use exemption slightly less than the U.S.' original request.

Industry is proud of its accomplishments in ozone protection, its efforts to phase out of CFCs ahead of schedule, and its investment of several billion dollars to identify and introduce ozone-protecting alternative technologies. We support the Montreal Protocol because it has been both economically and environmentally effective. We oppose any efforts to jettison years of progress under the treaty.

The U.S. has been committed to its obligations under the Protocol and it should not renege on these obligations. Furthermore, U.S. businesses have made significant investments based on the mandates of the Protocol. Action resulting in sanctions under the Protocol would jeopardize these investments and discourage additional investments in the future. The U.S. has shown a strong commitment to the success of the Montreal Protocol. We urge you not to undertake any action to undermine this commitment.

Thank you for your interest in this matter.

Sincerely,


Dave Stirpe
Executive Director



Testimony of David Doniger

Natural Resources Defense Council

Hearing on Critical Use Exemptions for Methyl Bromide

**Subcommittee on Conservation, Credit, Rural Development, and Research
Committee on Agriculture
U.S. House of Representatives**

March 10, 2005

1200 New York Ave., NW
Washington, DC 20008

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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 Protocol is working and has begun to heal the ozone layer, 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.
- Five U.S. producers and distributors had accumulated huge methyl bromide stockpiles equaling *at least 22 million pounds* – at least 40% of the U.S. baseline – a year ago. We now know that *at least 24 other companies* also hold methyl bromide stockpiles, indicating that overall stockpiles may be even larger.
- The reality is that there is no shortage of methyl bromide for farmers and other users with legitimate critical needs. In 2005, the existing stockpile plus new production allowed by EPA will be at least *double* the total amount needed for critical uses.
- Excess methyl bromide exemptions allowed this year will cause more than 10 deaths from skin cancer, more than 2000 other skin cancers cases, and more than 700 cataract cases.
- U.S. government data show that the total amount of methyl bromide used for fumigating fields and structures in 2003 was just over 30% of the 1991 baseline, or about 17 million pounds – *15% less* than the amount claimed to be critical in 2005.
- The amount approved to date for critical users in 2006 (27% of baseline) is nearly equal to the total amount used by *all* users (not just those with critical uses) in 2003.
- Likewise, the U.S. 2007 critical use request (29% of baseline) is virtually equal to the total amount applied by *all* users in 2003.
- The 2006 and 2007 requests do not reflect the progress made with alternatives since 2003.
- 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 present written testimony on the critical use exemptions from the phase-out of methyl bromide, on behalf of the Natural Resources Defense Council (NRDC) and its more than one million members and on-line supporters. 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 this year are *more than double* the amount that the government says is needed this year by critical users. New chemicals are available to substitute for methyl bromide in important segments of the current market, such as mills and other structures. The amount that the U.S. has requested for critical users in 2007 is just a shade less than the total amount used by *all* users – both critical and non-critical – in 2003. So where is the problem?

I want to be clear that NRDC is *not* trying to stop use of methyl bromide where farmers or others have legitimate critical use needs and lack adequate alternatives. Under the Montreal Protocol and the Clean Air Act, the United States has committed to phase out methyl bromide over a 12-year period ending on December 31, 2004. That agreement provides, appropriately, for limited exemptions after that date for critical uses. We understand and accept that some methyl bromide will continue to be needed for some period of time. We are concerned, however, about attempts to abuse the critical use exemption process to allow far more than is really needed, and to stop, or even reverse, the phase-out process.

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 chemicals, including methyl bromide, stays on schedule.² Dr. Mario Molina, the atmospheric scientist who won the Nobel Prize for discovering 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 Now is not the time to tamper with the Montreal Protocol or the Clean Air Act.

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.

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>.

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 (attached).

Millions of concerned parents check the UV Index and cover their kids with sunscreen before letting them go out in the sun.

Methyl bromide is the most powerful ozone-depleter still in widespread use. 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.⁴

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.

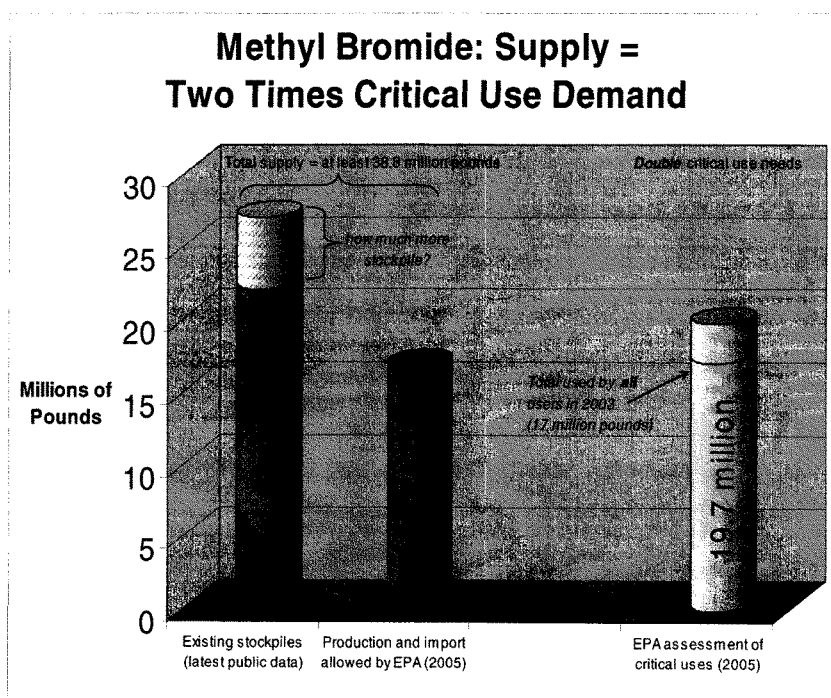
Exemptions for 2005. Allow me to start with the critical use exemptions for 2005. Here is the problem in a nutshell. Under the Montreal Protocol and U.S. law, methyl bromide production and import was to end on December 31, 2004, except for limited exemptions for critical uses. The United States has agreed *three times* – in 1997 and *twice* in 2004 – on the ground rules for critical use exemptions. 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 methyl bromide production and consumption is permitted after 2004 *only* if existing stockpiles of the chemical are insufficient to meet critical use needs.

Government data demonstrate that U.S. chemical producers, importers, and distributors possess an enormous stockpile of methyl bromide, the total amount of which exceeds the quantity the government says is needed for all critical uses in 2005. Our

⁴ 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>.

international commitments and our domestic law require this stockpile to be dedicated to critical uses, thereby minimizing or eliminating the need to produce additional methyl bromide and to enlarge the threat to the ozone layer. These legal requirements and administration commitments have been ignored.

The chart below summarizes the situation. The column at the right represents the amount that the government (in EPA regulations issued in December) has said is needed for critical uses in 2005. Let's take that figure – 19.7 million pounds – at face value for a moment, though I will return to it. The left column shows the amount of stockpiles



known to be held by just five companies (Great Lakes Chemicals, Albemarle, Ameribrom, Tri-Cal, and Hendrix and Dail) at the end of 2003 – at least 22 million pounds and perhaps a great deal more. The December regulations revealed that there are actually 29 companies that hold methyl bromide stockpiles. The middle column shows the amount of new production and import allowed in 2005 by the December regulations – 16.8 million pounds. If you add the stockpile amount (at least 22 million pounds) to the new production and import (16.8 million pounds), the total supply available in 2005 is nearly 39 million pounds – *double* the year's 2005 critical use needs.

How do we know about the stockpiles? The truth is that methyl bromide producers, importers, and distributors have gone to great lengths to hide the size of the methyl bromide stockpile from the Congress, their customers, and the public. But a year ago, in response to a request from Energy and Commerce Chairman Joe Barton, EPA informed Congress that “stockpiling has indeed taken place.”⁵ The EPA letter did not disclose the actual size of the existing stockpile, on the ground that the companies had 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*.⁶

⁵ 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).

⁶ 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:

(footnote continued next page)

NRDC has gone to court under the Freedom of Information Act 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.⁷ But the agency still has not released either the 2003 data, or the more complete 2004 data. What stands in the way is a pair of counter-suits brought by two of the 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.⁸ They appear to be following a brazen strategy of secrecy and frivolous litigation in order to deceive 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.

Now let me return to the government's estimate of 2005 critical use needs. At 19.7 million pounds, the amount allowed by the exemption regulations is 15 percent larger than the total amount used by *everyone* in 2003. How do we know this? 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

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- 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.

⁷ See Affidavit of Byron R. Brown, EPA Assistant General Counsel at ¶15, *NRDC v. Leavitt*, No. 04-1295 (D.D.C. filed Aug 2, 2004).

⁸ The companies filed two "reverse-FOIA" cases in other courts to block disclosure. See *Ameribrom v. Leavitt*, 2:04-cv-04393 (D. N.J., filed Sept. 9, 2004) and *Hendrix and Dail v. Leavitt*, 04-CV-134 (E.D.N.C., filed Sept. 14, 2004). Both courts have stayed these cases pending decision of *NRDC v. Leavitt* by the court in Washington.

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 – *15 percent less than the amount claimed to be needed in 2005.*

Why is the assessment of 2005 critical use need larger than the actual total use by all users 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 was old data that did not reflect the rapid progress made in reducing use by 2003. Second, the assessment employed patently unreasonable adverse assumptions that substantially magnified apparent “needs,” such as assuming that worst-case pest conditions hit *everywhere at once*, and that extra reserves are required because the marketplace will not efficiently move existing supplies of methyl bromide to wherever 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 other farm chemical is inventoried and distributed the unrealistic way assumed in the government’s critical use assessments.

These excess exemptions have real-world public health consequences. 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 “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.”⁹ Even more deaths and illnesses will be incurred around the world.

I emphasize that this is the damage from producing *twice* as much methyl bromide as farmers and other users really need in 2005. Because farmers’ needs can be met without so much methyl bromide, and without causing this damage to the ozone layer and to our health, NRDC has challenged the exemptions in the United States Court of Appeals for the District of Columbia Circuit. Indicating that it takes these concerns very seriously, the Court has ordered this appeal heard on a fast track later this year, in about half the time required for a normal case.

Exemptions for 2006 and 2007. Let me turn now to 2006 and 2007. Last November, the U.S. obtained agreement to exemptions of 27 percent of our baseline level – more than 15 million pounds – with the opportunity to press the case for more at the next meeting in the summer. This is almost as much as was used in 2003 by *all* users. Those with critical use needs are only a subset of all users. Furthermore, there has been continued progress since 2003 in registering and adopting alternatives. As just one example, sulfuryl fluoride is now available to replace nearly all structural fumigation needs for methyl bromide. It is hard to see why any more methyl bromide is needed in 2006.

As for 2007, the U.S. request is for 29 percent of baseline – about 16.3 million pounds – essentially the same amount used by everyone in 2003. Again, where is the accounting for the real progress being made in developing and applying effective alternatives?

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⁹ See Affidavit of Dr. Sasha Madronich (attached).

So despite the claims you will hear today, the truth is that there is far more methyl bromide available than needed to meet real critical use needs. The excess will result in more 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 is working successfully – 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 limit the exemptions to smaller amounts that reflect real need and lack of alternatives.

Thank you for the opportunity to address these issues.

STATEMENT OF REBECKAH FREEMAN

Good morning Chairman Lucas, Mr. Holden and members of the subcommittee. My name is Rebeckah Freeman. I am director of congressional and regulatory relations for pesticides, crop protection and air quality issues for American Farm Bureau Federation, the Nation's largest general farm organization. On behalf of our membership, I want to thank you for your interest in this precedent-setting challenge and for the opportunity to address the subcommittee regarding our alarm and disappointment over the critical use exemption (CUE) process under the Montreal Protocol.

Non-critical use of methyl bromide in the United States was completely phased-out at the beginning of this year, in compliance with the Montreal Protocol as incorporated in the Federal Clean Air Act. Where economically and technically feasible alternatives exist, agricultural users have met the phase-out schedule and stopped using this fumigant. However, despite significant ongoing efforts to find alternatives, methyl bromide remains an indispensable pest control tool for important uses in crop production, grain storage, food processing and general pest management. For many agricultural users, methyl bromide is essential to their economic survival; for consumers, it assures a safe and reliable food supply. It is precisely these situations for which a CUE was designed and it should be available for appropriate agricultural uses.

I am here to make three points:

Securing continued, adequate availability of methyl bromide for domestic users through the critical use exemption process is economically essential, scientifically defensible and legally justified; The Montreal Protocol CUE review process is broken and the United States should work actively to repair the system; and In light of international reluctance to honor the terms of the protocol, Congress should work to assure that U.S. agricultural users have fair access to the methyl bromide needed to provide consumers a quality and affordable domestic product.

Importance

Methyl bromide has two main agricultural uses: fumigation of soil prior to planting called pre-plant treatment, and fumigation of harvested commodities and foods—called post-harvest treatment.

The use of methyl bromide as a pre-plant treatment is essential to the production of strawberries, tomatoes, grapes, almonds, walnuts, peppers, eggplant and cut flowers. To gain an economic perspective, a recent collaborative study by USDA and the University of Florida found that a complete ban on farm uses of methyl bromide for annual fruit and vegetable crops in California and Florida would result in estimated losses of about \$200 million annually in gross shipping point revenues, which represented about 20 to 30 percent of estimated revenues from treated commodities in each state.

Pre-plant treatment with methyl bromide controls soil-borne fungal pathogens and various pests that reduce vigor of newly planted crops, and right now there is no feasible alternative to this chemical. Methyl bromide is linked directly to improved yields because the need to hand weed and cultivate soil is reduced, resulting in more efficient irrigation. Better yields mean better margins. Better margins mean more financial stability. Poor yields mean less stability, in some circumstances putting a producer at risk of not getting next year's planting loan.

Methyl bromide is used for post-harvest treatment used to meet sanitary standards set by the Food and Drug Administration and importing countries for grains, dry beans, raisins, prunes, figs, dates, almonds and walnuts. These products are typically treated before and during storage and prior to being packed or shipped. Storage structures, containers and processing facilities are also fumigated to ensure food safety.

For those without feasible alternatives, methyl bromide continues to be the only consistently effective and economical treatment that can be applied within a flexible timeframe without harm to the food product, or, in some circumstances, other natural resources. With rare exception, it works every time, all the time.

Since U.S. ratification of the Montreal Protocol, agriculture has devoted enormous time, effort and hundreds of millions of dollars to finding technically and economically feasible alternatives for methyl bromide. The good news is the U.S. has drastically decreased its non-essential use of methyl bromide because some alternative treatments and combinations have become available for some users. However the reality is that feasible alternatives do not exist and are not expected soon for the agricultural users currently requesting CUE consideration. Despite claims to the contrary, there simply is no one-size-fits-all replacement or combination of replacements that work as effectively, consistently or affordably as methyl bromide.

In the end, American consumers will suffer greatly from agriculture's loss of methyl bromide. The phase-out means the United States will increasingly depend on imported food sources that are potentially less regulated, less reliable and less safe.

BROKEN PROCESS

At previous oversight hearings on this issue, Members of Congress have voiced concerns about the international treatment of and fairness towards the U.S. CUE nomination. Unfortunately, Congress' concerns have not resonated within the international community and the Montreal Protocol process of granting CUEs grows steadily worse. For both 2005 and 2006, the justified U.S. CUE nomination was significantly cut by the international reviewers with little explanation or opportunity for meaningful reconsideration. We are not optimistic that the review of the 2007 nomination will fare much better. First-hand observers of the process believe that some of the more influential parties to the Protocol—most significantly the European Union—are asserting a “take it or leave it” stance position when reviewing and adjusting the U.S. nomination. We hope that members of this committee will join with us insisting on improvements to the international process.

The terms of the protocol intend for the CUE process to provide relief to any user's critical, documented need for methyl bromide. Domestic agricultural users commit huge amounts of time, expertise and financial resources in preparing their annual individual CUE requests for the U.S. government. With the help of USDA, EPA invests considerable time and resources into submitting a thorough, consolidated CUE nomination package to the international reviewers. The State Department has gone to great lengths to advocate for American agriculture and defend the U.S. CUE request against relentless second-guessing from the parties. Unfortunately, most observers agree that the tremendous combined efforts of U.S. users and the Federal Government have borne little, if any, fruit.

The 2005 and 2006 “internationally approved” U.S. CUE allowances were cut significantly from their original nominations. For 2005, the parties even made up a new requirement specifically for the American market that capped U.S. domestic production at 30 percent in addition to demanding a reduced CUE limit. Nowhere in the protocol is there any mention of direct limitations solely on production. Unfortunately, because U.S. agriculture must have an approved CUE percentage to prepare for each future year's planting season, our delegation is effectively forced to continue to accept objectionable terms with little hope of meaningful recourse or remedy.

The U.S. government clearly lays out the necessary information to prove that the requirements for granting a CUE under the Montreal Protocol are met. The protocol specifies a country's CUE be based on technical and economic feasibility of alternatives: no where does the protocol “limit” or cap the amount of methyl bromide that can be justified to meet CUE needs. Despite this, the Parties consistently argue that a CUE should not be more than 30 percent of baseline the last phase-down goal before phase out for non-critical uses. Farm Bureau strongly believes that unless there is a legitimate scientific concern, CUE approval should be based on real, sometimes fluctuating need and not subject to renegotiation to suit political ends.

Many individuals and groups have questioned the legitimacy and objectivity of the CUE process.— The actions of the international community—most recently at the Meeting of the Parties to the Protocol in Prague last November—graphically demonstrate that the international process is not objective, transparent or science-based. Non-governmental participants, like Farm Bureau and other user groups, are not allowed to observe or listen to technical debates among the Parties regarding our domestic needs and circumstances. Were it not for the cooperation and willingness of the U.S. delegation to keep us updated, the very people who rely on this process for their livelihood would not know their fate until the Parties decide to publicize the final agreements at a wrap-up plenary session held in the waning hours of the last day of the Meeting.

As stated in our policy, Farm Bureau supports the use of a fair, science-based process for critical use exemptions. The process should contain a reliable, consistent set of standards equitable to all parties involved. Like other Crop Protection Coalition groups, we are greatly concerned that the actions of some in the international and activist communities translate to other countries deciding the fate of American agriculture. We have seen and experienced enough of the Montreal Protocol process to be convinced that the CUE process—as it currently exists—cannot be relied on to fairly evaluate American agriculture's legitimate methyl bromide needs. The actions of the international community clearly illustrate that the Protocol is no longer about ozone protection. Rather, rules are being changed to suit the political agendas

and economic advantages of other countries' agendas that have nothing to do with environmental treaties and everything to do with putting American producers and consumers at risk.

The U.S. Government signed the protocol in good faith. Congress ratified its terms into law, our country has drastically reduced the use of ozone depleting substances, and domestic users of methyl bromide have unequivocally justified their critical use needs to the international reviewers. We are holding up our end of the bargain. We have every right to expect the Parties to do the same.

Farm Bureau and other allied groups in the Crop Protection Coalition believe that immediate improvements must be made to the Montreal Protocol's CUE process, specifically:

(1) The CUE process must be science-based, fair to all participants and consistent with the terms in the protocol. Farm Bureau strongly believes that unless there is a legitimate scientific question, CUE approval should be based on real, sometimes fluctuating need, and not subject to renegotiation or limitation to suit political ends.

(2) Given the current budget crisis, Congress should carefully evaluate the efficiency and effectiveness of U.S. monies appropriated for the multilateral fund sent to the Ozone Secretariat within the United Nations Environment Programme.

(3) The U.S. should continue to urge the international process to allow for multi-year CUE requests. U.S. negotiators have proposed this concept to the parties, but so far it has been rejected with little debate on the merits. We support a multi-year CUE because it would streamline the application process and relieve yearly burdens on the applicants and agencies. Most importantly, a multi-year CUE would allow for better planning among users: better planning leads to more flexibility and more flexibility could lead to further reductions in the need for methyl bromide.

On behalf of Farm Bureau members nationwide, thank you for the opportunity to address the subcommittee today regarding this complex issue. I will be pleased to answer any questions the subcommittee might have.

STATEMENT OF WILLIAM A. CAREY

I thank everyone for the opportunity to address this committee. I wish this hearing the very best because its efforts are vitally important to all CUE applicants. Perhaps the best way I can demonstrate the importance of this issue to our forest nursery industry is to briefly describe the Southern Forest Nursery Management Cooperative, indicate the limit of our research funds, and allow you to compare our resources to our efforts to find an alternative to MBr as indicated in the list of Research Reports to our membership. The Nursery Coop has a membership of 11 States, six forest industries and two private forest companies that pay an annual membership dues of approximately \$8,000 per entity. Its members produce about 80 percent of the seedlings for reforestation in the US and they direct our research effort. Over the last decade most of that effort has been trying to determine how we will produce seedlings without MBr. The list of Research Reports, starting in 1993 indicate we carried out about 30 nursery studies, or three studies per year, and this has been most of my research efforts through this period.

When our research efforts began in 1993, like those of most other groups, we focused on the apparently doable job of finding a suitable replacement for MBr by concentrating on already registered and available chemical substitutes such as dazomet, metham sodium and chloropicrin in various combinations. We also evaluated several less promising, non-chemical alternatives. Surprisingly, the alternatives we tested produced damaging side effects with far greater impact on their widespread implementation than the reduced seedling yield observed in trials. Despite our research efforts, we have been unable to make much progress against these side effects and since a peak in our optimism around 2000, our concern with finding an alternative before 2005 has increased.

We have been involved with the CUE process since June 2002 when I attended the first round of meetings held by the EPA at an Orlando session to discuss the application process. Working with instructions from that meeting we filed our first CUE in September 2002. In October, I was asked by the EPA to help evaluate CUE's for other commodity groups and working through that process I came to appreciate that economists at the EPA had a good understanding of the economic realities for forest nurseries and were doing their best to send forward CUE's for all commodity groups with all the requirements to MEBTOC. In June of 2003, we attended the second round of meetings to provide information on CUE applications in Orlando, and although there was a lot of uncertainty about how the allocation process was going to work, it seemed that the CUE application process was firming up. Representatives from the EPA and USDA seemed to have a better understanding of what they would need to meet the demands of MEBTOC. The Nursery Coop filed

a CUE in 2003 and I believe that our representatives from the US were surprised by how severely they were rejected. The response from MEBTOC seemed to indicate we were incapable of producing scientifically valid data. A recurrent comment was that more effort be made to containerize the entire US forest nursery industry. However, since bareroot seedlings sell for about \$0.04 each and container seedlings sell for about \$0.14 the increased price at the nursery gate for containerizing an annual crop of 1.2 billion seedlings is \$120,000,000, and this figure does not address seedling quality issues. An economic assessment by the National Agriculture Pesticide Impact Assessment Program (NAPIAP) in 1993 estimated MBr returned more per pound (\$109/lb) in forest nurseries than for other significant crop uses. I have made similar estimates from real data by projecting present values for expected plantation growth for different seedling size distributions in fumigated and not fumigated plots.

Last year members of the forest nursery industry discussed the proposed Final Rule and the CUE nominations for 2005 in conference calls and subsequently responded to the EPA with comments and questions. Although the figures in the 2004 nomination seemed to us to be minimal I came to believe that our representatives at the EPA really believed that the past years "misunderstandings" with MEBTOC had been worked out and these figures would pass essentially as taken forward. I believe that our meeting here today is to assess why that did not happen in Prague in 2004.

I have probably spent 50 percent of my research effort on evaluating fumigants over the last 10 years and in the last three, with others at the Nursery Coop, put in another 10 percent of my effort and time on producing CUE's and filling other information requirements. Given the amount of time devoted to the CUE process it is amazing how little we know about what we have accomplished for our industry.

When MBr was added to the Montreal Protocol, there was to be a scientific assessment of its role in ozone depletion. Data gathering went on for a couple of years and then a number just seems to have been assigned to its depletion potential. It appears to many that the MBr allotted at the end of the CUE process were also independent of data and the allotments were arrived at by working backward from a known number. It would help MBr users if the CUE process worked as intended. If it cannot it would help if we were told what the allocation number is so we could save our effort on the process. It may, as the saying goes, take an act of Congress.

