United States Department of State

Bureau of Oceans and International Environmental and Scientific Affairs

Washington, D.C. 20520

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February 18, 1987

To: EPA - Bill Long
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EB - Dennis Lamb
L/OES - Debbie Kennedy
L/EBC - Gerald Rosen
E - Martin Bailey

From: OES/E - Richard Elliot Benedick

Subject: Position Paper for UNEP Negotiations to Control Ozone-Depleting Chemicals, Vienna, February 23-27

Attached for your reference and for the information of all interested offices in your agency is the position paper for the subject negotiations, agreed at the February 13 interagency meeting.

OES/ENH:SButcher
2788T

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U.S. POSITION PAPER

UNEP Ozone Layer Protocol Negotiations

Second Session: February 23-27, 1987

Vienna, Austria

I. Background:

This is the second round of resumed negotiations under U.N. Environment Program auspices to control chemicals which deplete stratospheric ozone. In the first round, in Geneva December 1-5, 1986, most participants agreed that new measures must be taken in the near-term to control emissions of ozone-depleting chemicals. However, differences remain over the scope, stringency and time-phasing of control measures.

The U.S. delegation asserted that the risk to the ozone layer warrants a scheduled phase-down of emissions of the major ozone-depleting chemicals (e.g., CFC 11, 12, 113, 114, Halon 1211, and 1301). We also emphasized that the protocol should provide for periodic assessment and possible adjustment of the control measures, based on a periodic review of advances in scientific/technical knowledge. Neither the U.S. protocol text nor others (e.g., Canada's) were discussed in detail. It was apparent that many participants had not yet begun to consider in depth many of the elements the U.S. believes important to an effective protocol.

The U.S. delegation focused in the first round on seeking support for the basic elements of a protocol which would have both meaningful near and longer term control measures.

II. Overall U.S. Position:

The U.S position is to continue to pursue our ozone layer protection goals and objectives as advanced in the U.S. proposed protocol text.

III. U.S. Objectives for this Session:

Based on extensive discussions with representatives of other countries subsequent to the resumption of negotiations in Geneva last December, it appears highly unlikely that agreement on a protocol text can be reached in Vienna, and thus at least one further session will be required. Nonetheless, the U.S. delegation should approach this second session with a view to achieving agreement on as many of the key components of a protocol as possible, if not on the total document. At the minimum, it is important to ensure that all key components, and issues, are identified and debated.

The principal U.S. objectives therefore include:

- utilizing this session to heighten awareness of the ozone depletion problem, and the need for effective international controls on an urgent basis.

- soliciting the views on, and support for, the U.S. position from other nations (including developing countries) which have thus far not been heard from or have been noncommital.

- focusing attention on U.S. protocol text, and attempting to have it utilized as the principal negotiating vehicle.

- ensuring full discussion of ozone depletion risk management in the longer term, noting the essentiality of including this in any protocol.

- seeking to achieve agreement on as many areas as possible, and identifying differences in order to facilitate post-Vienna consultations and analyses.

IV. Positions on Key Issues:

This section identifies the key issues which the USG believes must be addressed in the protocol, along with instructions for the delegation for each.

1. Stringency: The delegation should support: (1) a near-term freeze at 1986 levels and (2) longer-term phased reductions, at levels substantial enough to give real incentive for conservation, recycling, and development of substitutes. The U.S. proposed text calls for phased reductions down to 95%. This figure should be used as the U.S. position, illustrating our conception of longer-term measures. However, within the context of the short and long-term goals, the delegation may indicate its willingness to consider other reduction levels and formulas, noting that the degree of stringency which it could accept depends on the timing (i.e. when a control provision would take effect) and the scope (i.e., which chemicals are controlled).

The U.S. proposed protocol text contains four phases in the reduction schedule. The delegation should continue to support

having several phases, so as to provide multiple opportunities for scientific review and risk assessment before the required reductions take effect, and to provide "milestones" by which Parties' progress in achieving reductions can be gauged.

2. Timing: The delegation should support a timeframe for the controls which: (a) is short enough to provide incentive for the development of conservation/recycling techniques and substitutes, yet (b) long enough that compliance does not create undue economic disruption.

Since it is likely to be 3-5 years before the protocol enters into force, the delegation should support having the near-term freeze take effect within one year after entry into force, with the final phase of 95% reduction taking effect within 10 - 14 years after entry into force (based on current analysis).

3. Scope: The general U.S. objective is for the protocol to cover all major ozone-depleting chemicals. Therefore, the delegation should support having the protocol control the following chemicals: CFC 11, 12, 113, 114, and Halon 1211 and 1301. In the U.S. proposed text, reference is made to controlling "all fully-halogenated alkanes", which would include other chemicals in addition to those listed above. This discrepancy can be corrected by replacing the phrase "fully-halogenated alkanes" with "the controlled substances" and then listing the specific chemicals in an annex.

For the purposes of this session, the delegation should maintain the U.S. position of including all six chemicals listed above in the reduction schedule. However, if there is significant opposition to this position and, depending on the dynamics of the discussions, the delegation may indicate that the scope question is linked to the stringency and timing questions; e.g., the broader the scope of control, the greater the flexibility which the U.S. could show on stringency or timing, and vise versa. If this is indicated, the delegation should insist that all six chemicals be covered in the protocol (even if not initially controlled) and that the protocol provide a mechanism for moving chemicals onto (or off of) a control schedule, based upon the periodic scientific/technical review. In this regard, the delegation may advance the "three-tiered" approach for addressing the scope question (see separate paper).

4. Calculation of Emissions: The delegation should support measuring compliance with the reductions in Article II by use of "adjusted production" (production + bulk imports - bulk exports to parties - amount destroyed); i.e., by removing the brackets in Article III para. 1 of the U.S. proposed text. There is considerable efficacy in using this formulation as the measure of emissions for each Party to the protocol, because it: (a) allows for free trade among the Parties; (b) gives countries which use but do not produce the controlled chemicals some responsibility for protecting the ozone layer; and (c) provides a more equitable allocation than control measures based strictly on production. The EC alternative

-- using production as the surrogate for emissions -- is less equitable, excludes non-producers, and may create an incentive for movement of production capacity "offshore" to non-Parties. The delegation should therefore oppose basing the control measures strictly on production.

5. Allocation: The U.S. proposed text implicitly allocates an emissions limit via a reduction schedule based on current levels of adjusted production. The delegation should oppose any explicit allocation mechanism; e.g., such as that in the Canadian or USSR draft texts, on the grounds of the complexity of such mechanisms and the difficulty of negotiating what would amount to emission allocation rights worldwide.

6. Countries with Low Adjusted Production: The delegation may support an exemption for countries which have an adjusted production of less than a certain per capita level. The Nordic proposal for an exemption up to .2 kg per capita may allow too much expansion of global emissions.

7. Assessment and Adjustment of Control Measures: The delegation should support retention of language in the U.S. draft Article IV, while being open to alternative versions as long as they improve rather than dilute the commitment to a serious periodic review. If there is significant opposition to including the establishment of an international monitoring and detection network in the protocol (para. 1 of Art. IV), the delegation should insist that

in lieu of such a provision, the commitment to such a network be confirmed by a Diplomatic Conference resolution calling for the Convention Parties to establish and support the network as soon as possible.

The current U.S. draft calls for the scientific panel to convene at least one year before implementation of future reductions. The delegation should seek to have the scientific panel convene two years before each reduction and the Parties to carry out their assessment at least one year before each scheduled reduction. This change will allow adequate time for conducting a fairly comprehensive assessment.

The delegation should amend paragraph 3 of the U.S. draft to insert "and in light of new technical and economic information" after "scientific review." This will enable Parties to make an informed risk management decision prior to another phase taking effect.

The current Article IV would have the Parties adjust the stringency, timing, or scope of the control article using the protocol amendment procedures in the Convention (Article 9), with slight modification. Under the "three-tiered" approach, stringency and timing could be adjusted via Article 9 of the Convention and scope via Article 10, amendment of annexes. The delegation should explore the possibility of more streamlined procedures for the limited scope required for this Article of the Protocol.

8. Control of Trade:

a. Import Restrictions - Restricting imports from non-parties would: (a) protect industries in countries party to the protocol from being put at a competitive disadvantage vis a vis industries of non-parties; (b) create an incentive for non-parties to join the protocol, in order to preserve existing (or gain access to new) export markets in other Parties; and (c) discourage the movement of capital or production facilities to non-Parties.

The delegation should therefore strongly support paragraph 1 of Article IV of the U.S. proposed text, which calls for a ban of bulk imports from non-parties. The delegation should replace "fully-halogenated alkanes" with "the controlled substances", and should support having the same number of years for this provision to take effect as for the first phase in the Article II reduction schedule.

In principal, the same rationale in support of restrictions on bulk imports from non-parties applies to product imports (i.e., products made with or containing the controlled substances). However, developing and implementing such restrictions, and ensuring that they are applied uniformly by all parties, could unduly slow down the negotiations if all the details were to be worked out in the protocol itself. Hence, the U.S. proposed text calls for the parties to "jointly study the feasibility" of restricting imports of products from non-Parties. In order to emphasize the importance which the U.S. attaches to protecting protocol members

from being put at a competitive disadvantage, the delegation should, during discussions on this issue, offer the following amendment to the U.S. text:

> Within [ ] years after entry into force of this Protocol, each Party shall restrict imports of products containing substances controlled by this Protocol from any state not party to this Protocol [unless such state is in full compliance with Article II and this Article, and has submitted information to that effect as specified in paragraph 1 of Article VI]. At least one year prior to the time such restrictions take effect, the Parties shall elaborate in an annex a list of the products to be restricted and standards for applying such restrictions uniformly by all Parties.

This should become new paragraph 2 of Article V. The delegation should support having the number of years for this provision to take effect no later than the second phase in the Article II reduction schedule. Current paragraph 3 of the U.S. text would remain, with the words "containing or" deleted and the phrase "fully-halogenated alkanes" replaced by "substances controlled by this protocol". As appropriate, the delegation may also add the phrase "and practicality" after the word "feasibility".

b. Export Restrictions:

The U.S. proposed text includes (in Article V par. 2) bans on technology exports to, and direct investment in, the territory of non-parties. However, further assessment of these provisions subsequent to the December session has indicated that such bans may not be effective. With respect to technolgy exports, the ready availability of the technology would make it difficult for all the

parties to enforce a ban. With respect to an investment ban, the diversity (and velocity) of transboundary monetary flows would make such a ban virtually impossible to enforce by any party. In addition, it is not clear that the U.S. has the legal authority to impose such a ban, other than the general language in section 157 of the Clean Air Act (see separate paper).

In discussions on these issues, the delegation should note the importance of technology and investment flows to non-Parties. The delegation should support retention of sub-par.(a) (export of technologies) in order to emphasize the importance which the U.S. attaches to this issue -- and to use as a "tradeable" in subsequent sessions for the higher priority import restrictions. In addition, the phrase "for producing fully-halogenated alkanes" should be replaced by "for the production or use of the controlled substances".

The delegation should propose that sub-par.(b) (the ban on direct investment) be deleted, and a new paragraph be added:

> Parties shall not provide bilateral or multilateral subsidies, aid, credits, guarantees, or insurance programs for the export of products, equipment, plants, or technology for the production or use of the controlled substances.

V. Positions on Other Articles:

The delegation should support the revised text prepared by the "Working Group on institutional and financial matters "(UNEP/WG.157/CRP.9) at the December session, except as indicated below:

1. Article I (Definitions) - In order to clarify the distinction between "bulk" and "product" exports/imports, the delegation

should seek to have the following definition added:

> "bulk" exports or imports means any export or import of a commodity containing [10 lbs.] or more of non-recycled substance(s) controlled by this protocol.

2. Article III (Secretariat) - Redraft subparagraphs (b) and (c) so as to be consistent with new operative articles.

3. Article XII (Entry into Force) - The USSR may oppose the working group's text (in CRP.9). In particular, they may take issue with the requirement of nine instruments of ratification (etc.) and the thirty days entry into force provision in para. 1, preferring instead eleven instruments and 90 days, respectively, as indicated in Article 17, para. 2 of the Convention. The delegation should initially support the 9/30 format. However, if this appears to be a major obstacle to Soviet concurrence on this article, the delegation should propose a 10/60 format and may, if other delegations do not have a strong preference to the contrary, agree to the 11/90 format.

The delegation should also support amending Article XII so as to ensure that the protocol enters into force only when a sufficient number of the major producer/user countries have submitted instruments of ratification (etc.). To this end, the delegation should propose adding qualifying language to paragraph 1, specifying that of the number of instruments required for entry into force, [X] number must be from nations with adjusted production greater than [Y]. This will decrease the possibility of the protocol entering into force with just the U.S. and 9 or 10 developing countries as the initial Parties, thus putting the U.S. at a competitive disadvantage vis a vis its primary competitors.

In order to ensure that nations which become Party to the Protocol do not have less obligations than nations already Party, and to remove an incentive for countries to be "free-riders" by delaying entry into the protocol, the following sentence should be added at the end of paragraph 3:

> "Any such Party shall assume all applicable obligations then in effect for all other Parties.

Although agreement on including this sentence in the final protocol text may not be achievable, having it inserted at this session is tactically beneficial in that it gives other countries the message that there are advantages to joining the protocol as one of its initial parties, and that there is a potential penalty for not joining the protocol right at the start (i.e., the controls to date would not be phased in for that Party).

VI. Other Issues:

A. Future Negotiating Schedule - The original UNEP schedule called for the Diplomatic Conference to be held in April 1987. If it appears that the protocol is sufficiently close to completion at the conclusion of this session, the delegation should support holding the Conference May 4-8, 1987. If not, the delegation should push for a third negotiating session during the May 4-8 time-slot, and support having the Diplomatic Conference as soon as possible thereafter; i.e., in the first or second week of July. If it appears that two negotiating sessions prior to the Diplomatic Conference are needed, the delegation should push for a May-July timeframe, with the Diplomatic Conference as possible thereafter.

B. Financial Contributions for Future Meetings - UNEP has previously indicated that it may not have sufficient funds for future meetings and/or to support participation by developing country representatives. UNEP may raise this issue again at this session. If so, the delegation should indicate that U.S. EPA is willing to contribute up to $20,000. for these purposes.

C. Press: All press inquiries should be referred to the head or alternate head of delegation, or their designee.

D. Budgetary Commitments: The delegation should not commit the USG to any activity that cannot be funded out of current appropriations.

Drafted by: Jim Losey - EPA/OIA (382-4894)
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2/18/87

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(12-84)

United States Government **Department of Energy**

memorandum

DATE: February 19, 1987

REPLY TO ATTN OF: PE-40

SUBJECT: Meeting on Acid Rain and Ozone Layer Protection

TO: See Distribution List

The working group will meet at 10:30 a.m. on Friday, February 20 in room 208 of the EOB. The acid rain discussion will focus on steps that must be taken to prepare the President for the upcoming summit meeting with Prime Minister Mulroney.

A draft paper summarizing the Envoy's recommendations, actions taken and options for immediate future actions is attached. The draft paper prepared by the Bilaterial Advisory and Consultative Group for their principles is also attached.

For background on the ozone issue, the latest U.S. Position Paper is attached.

Ted Harris
Policy, Planning and Analysis

Distribution List:
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100TH CONGRESS
1ST SESSION

S. CON. RES. 19

IN THE SENATE OF THE UNITED STATES

Mr. WIRTH (for himself, Mr. Baucus, Mr. Chafee, Mr. Mitchell, Mr. Stafford, Mr. Gore, Mr. Durenberger, Mr. Harkin, Mr. Bumpers, Mr. Kennedy, Mr. Adams, and Mr. Bradley.) submitted the following concurrent resolution; which was _____

CONCURRENT RESOLUTION

Urging the President to take immediate action to reduce the depletion of the ozone layer attributable to worldwide emissions of chlorofluorocarbons.

Whereas a growing scientific consensus supports the view that the worldwide release of chlorofluorocarbons and certain other manufactured chemicals can deplete the Earth's ozone layer resulting in adverse effects on human health and the environment;

Whereas it is necessary to take appropriate measures to protect human health and the environment against adverse effects resulting from the release of chlorofluorocarbons and certain other manufactured chemicals which may deplete the ozone layer;

Whereas there is a need for international cooperation to reduce emissions of chlorofluorocarbons and certain other manufactured chemicals which may deplete the ozone layer;

Whereas the worldwide use of chlorofluorocarbons continues to grow;

Whereas safe alternatives can be developed in a reasonable time; and

Whereas the United States and certain other countries have already taken formal precautionary measures for reducing emissions of chlorofluorocarbons by imposing a ban on the use of chlorofluorocarbons as aerosol propellants: Now, therefore, be it

Resolved by the Senate (the House of Representatives concurring), That—

(1) the Congress supports the President in taking appropriate measures to protect human health and the environment against adverse effects resulting from the release of chlorofluorocarbons and other manufactured chemicals that may deplete the ozone layer;

(2) the Congress further urges the President to negotiate an immediate reduction in the use of chlorofluorocarbons in the European Community and in other nations; and

(3) the Congress further urges the President to negotiate a worldwide program as expeditiously as practicable for the elimination of fully halogenated

chlorofluorocarbons and other manufactured chemicals that may deplete the ozone layer.

(Same as H. Con. Res 19)

100TH CONGRESS
1ST SESSION

H. CON. RES. 47

Urging the President to take immediate action to reduce the depletion of the ozone layer attributable to worldwide emissions of chlorofluorocarbons.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 18, 1987

Mr. RICHARDSON (for himself, Mr. BATES, Mr. RINALDO, Mr. EDWARDS of California, Mr. WAXMAN, Mr. RODINO, Mr. SCHEUER, Mr. MARTINEZ, Mr. HAMILTON, Mr. MRAZEK, Mr. SIKORSKI, and Mr. BERMAN) submitted the following concurrent resolution; which was referred jointly to the Committees on Energy and Commerce and Foreign Affairs

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CONCURRENT RESOLUTION

Urging the President to take immediate action to reduce the depletion of the ozone layer attributable to worldwide emissions of chlorofluorocarbons.

Whereas a growing scientific consensus supports the view that the worldwide release of chlorofluorocarbons and certain other manufactured chemicals can deplete the Earth's ozone layer resulting in adverse effects on human health and the environment;

Whereas it is necessary to take appropriate measures to protect human health and the environment against adverse effects resulting from the release of chlorofluorocarbons and certain other manufactured chemicals which may deplete the ozone layer;

Whereas there is a need for international cooperation to reduce emissions of chlorofluorocarbons and certain other manufactured chemicals which may deplete the ozone layer;

Whereas the worldwide use of chlorofluorocarbons continues to grow;

Whereas safe alternatives can be developed in a reasonable time; and

Whereas the United States and certain other countries have already taken formal precautionary measures for reducing emissions of chlorofluorocarbons by imposing a ban in 1978 on the use of chlorofluorocarbons as aerosol propellants: Now, therefore, be it

Resolved by the House of Representatives (the Senate concurring), That:

(1) The Congress supports the President in taking appropriate measures to protect human health and the environment against adverse effects resulting from the release of chlorofluorocarbons and other manufactured chemicals that can significantly deplete the ozone layer.

(2) The Congress further urges the President to negotiate an immediate reduction in the use of chlorofluorocarbons in the European Community and in other nations.

(3) The Congress further urges the President to negotiate a worldwide program as expeditiously as practicable for the elimination of fully halogenated

chlorofluorocarbons and other manufactured chemicals that may deplete the ozone layer.

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100TH CONGRESS
1ST SESSION

H. CON. RES. 50

Concerning the encouragement and support for international negotiations, pursuant to section 156 of the Clean Air Act, by the President to develop a protocol to the Vienna Convention for the Protection of the Ozone Layer setting forth standards and regulations to protect the stratosphere from the adverse effects of chlorofluorocarbons.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 19, 1987

Mr. DINGELL (for himself and Mr. LENT) submitted the following concurrent resolution; which was referred jointly to the Committees on Energy and Commerce and Foreign Affairs

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CONCURRENT RESOLUTION

Concerning the encouragement and support for international negotiations, pursuant to section 156 of the Clean Air Act, by the President to develop a protocol to the Vienna Convention for the Protection of the Ozone Layer setting forth standards and regulations to protect the stratosphere from the adverse effects of chlorofluorocarbons.

Whereas although the stratospheric ozone layer is an exceedingly valuable resource for the present and future population of the world, that layer has been, is being, and will continue to be, adversely affected or depleted by the long-lived chlorine molecules which stem from the worldwide release of chlorofluorocarbons into the atmosphere;

Whereas this stratospheric ozone layer depletion, by permitting greater quantities of harmful ultraviolet radiation to reach the Earth surface, will pose significant (even if currently difficult to quantify fully) unacceptable risks on human health and the environment throughout the world;

Whereas there is an urgent need to foster and encourage the development of safe, effective, and nontoxic substitutes in a reasonable time for fully halogenated chlorofluorocarbons used in aerosols, refrigeration, air conditioning, rigid foam insulation, flexible upholstery foam, fire extinguishers, cleaning solvents, and other purposes and to expand opportunities for the recovery and recycling of such ozone depleting chemicals;

Whereas the United States and other countries have already taken formal precautionary measures for reducing emissions of chlorofluorocarbons by imposing a unilateral ban on the use of chlorofluorocarbons as aerosol propellants, but believes that international action is urgently needed;

Whereas section 156 of the Clean Air Act directs the President to enter into international agreements to develop standards and regulations which protect the stratosphere;

Whereas the Vienna Convention for the Protection of the Ozone Layer, signed in March 1985 under the auspices of the United Nations Environment Program and ratified, consistent with such section 156 of the Clean Air Act, by the United States in August 1986, was an important first international step in protecting the stratospheric ozone layer;

Whereas the United States is now engaged in international negotiations under the auspices of the United Nations Environment Program on a protocol to the convention which

would provide for global regulatory controls on ozone-depleting chemicals;

Whereas any international agreement negotiated by the United States must accomplish two important goals—the protection of the public health and the environment and the protection of American jobs: Now, therefore, be it

Resolved by the House of Representatives (the Senate concurring), That—

(1) The Congress supports the President in seeking appropriate global measures, pursuant to section 156 of the Clean Air Act, to protect human health and the environment against adverse effects resulting from the release of chlorofluorocarbons that can significantly deplete the ozone layer through the development and adoption of a protocol to the Vienna Convention for the Protection of the Ozone Layer, signed in March 1985.

(2) The Congress further urges the President to negotiate as part of such protocol an immediate reduction in the use of chlorofluorocarbons in the European Community and in the other nations.

(3) The Congress further urges the President to negotiate as part of such protocol, as expeditiously as practicable, a worldwide program for the development of safe, effective, and nontoxic nonozone depleting chemicals and for the elimination, in a reasonable time,

of fully halogenated chlorofluorocarbons that may deplete the ozone layer.

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Chafee bill
S. 571

Section by Section Analysis of

The Stratospheric Ozone and Climate Protection Act of 1987

Section 1. Short Title

Section 2. Congressional Findings. Includes findings that manufactured substances, such as chlorofluorocarbons, are polluting the atmosphere and may be contributing to the related environmental problems of stratospheric ozone depletion and global climate change due to the greenhouse effect; these related problems threaten human health and the environment on a global scale; it is necessary to control international trade in chlorofluorocarbons and other ozone depleting substances to protect our global environment; and the United States needs to be the world leader in developing substitutes for these harmful chemicals.

Section 3. Objectives and National Goal. Establishes as a national goal, the elimination of atmospheric pollution with manufactured chemicals, such as chlorofluorocarbons.

Section 4. Definitions. Includes definitions of "household applicances" and "medical purposes" that receive special consideration under Section 8 "manufactured substances"; and "substances covered by this Act".

Section 5. Listing of Regulated Substances. There are two lists of regulated substances: (1) a priority list of chemicals that must be virtually eliminated over the next 6 years (reduce

production by 95%); and (2) a list of other chemicals with ozone depletion potential. The priority list includes the most popular and harmful chlorofluorocarbons (11, 12 and 113) and halons (1211 and 1301). The second list includes chemicals such as methylene chloride, carbon tetrachloride, and methyl chloroform.

The production of chemicals on the second list is regulated and limited on the basis of overall ozone depletion potential. Since the regulated chemicals have differing, relative ozone depletion potential, producers are free to shift their production capacity from one second list substance to another, provided the total ozone depletion potential of chemicals manufactured by a producer is reduced significantly over the next eight years (to 5% of 1986 levels).

Section 6. Reporting. Producers of ozone depleting chemicals are required to submit annual reports to the EPA.

Section 7. Production Phase-Out for Priority List. This section sets forth the 6 year, 95% phase-out mentioned earlier.

Section 8. Limitation on Use. Recognizing that (1) there are some essential medical uses for these chemicals for which no safe alternative is likely to be developed, and (2) many people have recently purchased (or are planning to purchase) household appliances that depend on the continued availability of these chemicals, the phase-out in Section 7 is limited to 95% and, beginning in 1994, the chemicals that are produced can be used

only for medical purposes and to service and maintain household appliances.

Section 9. Limitation on Ozone Depletion Potential. This section sets forth the 8 year reduction in overall production of ozone depleting substances mentioned earlier.

Section 10. Production Phase-Out Exceptions. To encourage the recapture and safe destruction of harmful chemicals, a production credit that can be used to increase the production limits of Sections 7 and 9 is available upon proof of such destruction.

Section 11. Certification of Equivalent Programs. Chemicals with ozone depleting potential pose a threat to human health and the environment without regard to where such chemicals or products that use such chemicals are made. Protection of the environment necessitates the regulation of international trade and the imposition of import controls that track the domestic controls set forth in this Act. Therefore, unless a country of origin is certified as having a phase-out program similar to this Act, the regulated chemicals (or products) from such country cannot be imported into this country. Similarly, this Act will prohibit the use of the U.S. as a free port for transshipment of such chemicals (or products).

Section 12. Labelling. All containers of, or products made with, substances covered by this Act must bear a warning label.

Section 13-17. Miscellaneous Provisions on Federal Enforcement, Judicial Review, Citizen Suits, Separability, Relationship to Other Laws, and Authority of Administrator.

Baucus
S. 570

Section by Section Analysis
of Stratosphere Protection Act of 1987

Section 1. Short Title

Section 2. Congressional Findings

Includes findings that manufactured substances, such as chlorofluorocarbons, are polluting the atmosphere and may be contributing to the related environmental problems of stratospheric ozone depletion and global climate change due to the greenhouse effect; these related problems threaten human health and the environment on a global scale; it is necessary to control international trade in chlorofluorocarbons and other ozone depleting substances to protect our global environment; and the United States needs to be the world leader in developing substitutes for these harmful chemicals.

Section 3. Objectives and National Goal

Establishes as a national goal, the elimination of atmosphereic pollution from manufactured chemicals, such as chlorofluorocarbons.

Section 4. Definitions

Includes definition of "household consumer equipment" and "medical purposes" that receive special consideration under Section 9, "stratospheric ozone depletion factor," "manufactured substance;" and "substances covered by this Act."

Section 5 - Listing of Regulated Substances

There are two lists of regulated substances: (1) a priority list of chemicals whose production level is frozen at 1986 levels; and (2) a list of other chemicals with ozone depletion potential that must have ozone depletion potential reduced 95% over the next 8 years. The priority list includes the most popular and harmful chlorofluorocarbons (11, 12 and 113) and halons (1211 and 1301). The second list includes the chemicals listed on the priority list, plus other chemicals with ozone depletion potential including chlorofluorocarbons (22, 114 and 115); and carbon tetrachloride, methyl chloroform.

The production of chemicals on the second list is regulated and limited on the basis of overall ozone depletion potential. Since the regulated chemicals have differing, relative ozone depletion potential, producers are free to shift their production capacity from one substance to another, provided the total ozone depletion potential of chemicals manufactured by a producer is reduced significantly over the next eight years (to 5% of 1986 levels).

Section 6. Reporting

Producers of ozone depleting chemicals are required to submit annual reports to the EPA.

Section 7. production Cap for Initial List

This section caps the priority list chemicals at 1986 production levels on January 1, 1988.

Section 8. Limitation on Ozone Depletion Potential

This section sets forth the 8 year reduction in overall production of ozone depleting substances mentioned earlier.

Section 9. Limitation on Use

Recognizing that (1) there may be some essential medical uses for these chemicals for which no safe alternative is expected to be developed, and (2) many people have recently purchased (or are planning to purchase) household appliances that require the use of these chemicals, the phase-out in Section 8 is limited to 95% of current ozone depletion potential and beginning in 1998, the chemicals that are produced in excess of this limitation can be used only for medical purposes and to service and maintain household appliances.

Section 10. Production Phase-out Exceptions

To encourage recapture, safe destruction and closed use, a production credit that can be used to increase the production limits of Section 8, is available upon proof of such destruction or continued containment. A national security exemption is provided for production and use of halon 1211 and halon 1301.

Section II. Ozone Depletion Penalty

This section establishes a penalty for continued use of substances or practices contributing to ozone depletion, set at a level which will eliminate any competitive advantage of a competing substance.

Section 12 Labeling

All containers of, or products made with, substances covered by this Act must bear a warning label.

Section 13 - 17 Miscellaneous Provisions

On Federal Enforcement, Judicial Review, Citizen Suits, Separability, Relationship to Other Laws and Authority of Administrator.

Suzanne - Maurice + Chappe ... as introduced

States on July 1, 1986, or for which substantial preparation for such sale or use was made before such date, to the extent equitable for the protection of commercial investments made or business commenced in the United States before such date.

(b) This Act and the amendment made by this Act shall not deprive a patent owner of any other remedies available under section 271 of title 35, United States Code, section 337 of the Tariff Act of 1930, or any other provision of law.

SEC. 4. Beginning on the date one year after the date of enactment of this Act and each year for 4 additional years therefore, the Department of Commerce shall submit an annual report to the Congress on the effect of this Act and the amendments made by this Act, on the importation of ingredients to be used for manufacturing products in the United States in those domestic industries that submit formal complaints to the Department alleging that their legitimate sources of supply have been adversely affected.

SEC. 5. (a) Chapter 29 of title 35, United States Code, is amended by adding at the end thereof the following:

"§ 295. Presumption: product produced by patented process

"In actions alleging infringement of a process patent based on use, sale, or importation of a product produced by the patented process, if the court finds (1) that a substantial likelihood exists that the product was produced by the patented process and (2) that the claimant has made a reasonable effort to determine the process actually used in the production of the product and was unable so to determine, the product shall be presumed to have been so produced, and the burden of establishing that the product was not produced by the process shall be on the party asserting that it was not so produced."

(b) The table of sections for chapter 29 of title 35, United States Code, is amended by adding after the item relating to section 294 the following:

"295. Presumption: product produced by patented process."

Mr. DECONCINI. Mr. President, it gives me great pleasure to join my distinguished colleague from Utah, Mr. HATCH, in reintroducing the process patent bill that was passed by the Senate at the end of the 99th Congress.

As the new chairman of the Patents, Copyrights and Trademarks Subcommittee, let me take this opportunity to commend the excellent work of my predecessor, Senator MATHIAS, in the difficult task of trying to solve the pressing problem of process patent protection reform. Senator MATHIAS and his staff spent many hours working with all the interested parties trying to develop legislation that would not only afford new and more viable process patent protections for American companies, but would also insure that the interests of other industries and groups were accounted for. Senator HATCH and his staff were absolutely key elements to this process.

Although the bill Senator HATCH and I are introducing today unanimously passed the Senate last Congress, there were groups which for a variety of reasons opposed the legislation. A successful outcome during the 99th Congress was made less likely by the lateness of the date when serious negotiations began. Time simply ran out.

In joining Senator HATCH in introducing this bill today, I wish to convey my own sense of the importance and urgency of this legislation. Major trading partners of the United States, including Japan, West Germany, France, and the United Kingdom have process patent protection for their inventors and our patent law must be brought in line. This legislation would be a significant step toward enhancing American intellectual property rights because it gives patent owners the ability to sue for damages and an injunction in Federal district court when someone uses or sells in the United States, or imports into the United States a product made by their patented process. I believe developing a more effective system of protecting patents and other intellectual property rights through legislation such as this is essential to promoting American innovation and new technology.

My distinguished colleague from New Jersey, Senator LAUTENBERG, is introducing a different version of process patent legislation today and I welcome his views. I look forward to working with Senator LAUTENBERG and his staff as the Subcommittee on Patents, Copyrights and Trademarks strives to achieve the best possible patent protection legislation for our country. It would be foolish of us to believe that there is no room for improvement. I intend to schedule early hearings to ascertain the views of the various groups interested in this aspect of patent law and how this bill would affect those interests. I seek to maintain a proper balance between process patent protection reform and the interests of those industries that might be adversely affected, and I will be open to suggestions on the different ways we might achieve the same goals.

I believe that effective and fair process patent protection is among the highest priorities facing the subcommittee in the 100th Congress. The bill Senator HATCH and I are introducing today will contribute to the overall effort of improving America's trade and competitive position and deserves our immediate attention. I am hopeful that before this Congress ends, the President will have signed legislation to protect the fruits of American genius.

By Mr. D'AMATO (for himself and Mr. HATCH):

S. 569. A bill to amend the Saccharin Study and Labeling Act; to the Committee on Labor and Human Resources.

SACCHARIN STUDY AND LABELING ACT AMENDMENTS

● Mr. D'AMATO. Mr. President, I rise today to introduce legislation affecting tens of millions of American consumers dependent upon the artificial sweetener industry. I ask my colleagues to join my effort in supporting the continued use of artificial sweeteners.

Years ago the Food and Drug Administration proposed to remove artifical sweeteners from the market. At that time additional information was needed to confirm the safety or harm of sweeteners. The FDA decided to perform additional studies and to impose labelling restrictions on artifical sweeteners.

Since then Congress has forbidden the FDA to ban artifical sweeteners. Every 2 years the Congress has addressed the potential need for restrictions on artificial sweeteners. Each time Congress has concluded that artificial sweeteners should be exempt from an FDA ban for an additional 2 years.

My legislation would further extend the exemption for artificial sweeteners. Evidence accumulated in Senate hearings on the subject clearly indicates that artificial sweeteners consumed in reasonable quantities pose no threat to human safety. Therefore, I believe it is vital to continue allowing American the opportunity to consume food and drink containing artifical sweeteners.

Prior legislative actions to extend the moratorium on banning artificial sweeteners have been for a 2-year period. Every 2 years the Congress has been forced to revisit the moratorium issue, and every 2 years the Congress concludes that the moratorium should be continued.

This 2-year process is needlessly laborious and time consuming for Congress and the industry. Everyone involved is forced to re-address an old issue, even when no new information has arisen to alter the conclusions of Congress. My bill, therefore, would extend the moratorium for 5 years.

Although I am pleased to introduce legislation to address the issue of the artificial sweetener moratorium, the FDA is also addressing a related issue at this time. It is my understanding that the FDA will be ruling on a petition for a prior sanction relating to artificial sweeteners at some point this spring. I am hopeful that this issue can be resolved rapidly within the FDA.●

By Mr. BAUCUS (for himself, Mr. CHAFEE, Mr. MITCHELL, Mr. STAFFORD, Mr. DURENBERGER, Mr. GORE, Mr. WIRTH, and Mr. REID):

S. 570. A bill to reduce atmospheric pollution to protect the stratosphere from ozone depletion, and for other purposes; to the Committee on Environment and Public Works.

STRATOSPHERE PROTECTION ACT

● Mr. BAUCUS. Mr. President, I am introducing today, a bill to protect the stratosphere from ozone depletion.

Senator CHAFEE, the ranking minority member of the Subcommittee on Environmental Protection, along with

Senator MITCHELL, chairman of the Environmental Protection Subcommittee, worked closely with me in drafting this legislation and are original cosponsors. Mr. STAFFORD, Mr. DURENBERGER, Mr. GORE, and Mr. WIRTH, have also joined me and are original cosponsors of this legislation.

Rarely has the world been confronted with an environmental problem of such magnitude and severity as stratospheric ozone depletion.

The challenge to the environment posed by stratospheric ozone depletion is worldwide. It demands a worldwide solution, but at the same time, the United States is both a major source of the problem and through the efforts of its industry can provide the leadership to address this problem, by developing safe substitute chemicals.

This legislation is being introduced just prior to the beginning of the next negotiating session to develop an international protocol to protect the ozone layer. This session will begin next week in Vienna, Austria. The protection of the ozone in the stratosphere can ultimately only be solved through worldwide commitment to develop and use safe alternatives to these ozone depleting chemicals. The worldwide community tried and failed to reach an agreement in the past. Hopefully the current discussions will not fail.

It is my desire to see these negotiations succeed. These negotiations must be given an opportunity to work, but negotiations will not solve the problem, actions will. The level of action will determine whether additional steps will be required.

The strongest possible signal must be sent both within the United States and to the entire world, that the costs of inaction are too high, and the risk too great. The United States must demonstrate that it is committed to finding safe substitutes for these chemicals.

There is a need to move forward as a worldwide community, but the United States must not hesitate to move forward on its own if the worldwide community fails to act, or fails to go far enough. This legislation will provide the basis for that movement.

The burden of failure if the international community fails to come to agreement, will fall squarely on the shoulders of the European Economic Community and Japan. It is these two groups who to date, have been willing to risk the health and environment of all the peoples and all of the places of the world for short-term economic gain.

THE PROBLEM

Ozone depletion is a problem that will only be fully understood after it is too late to act.

We do not fully understand all of the complexities of the science of ozone depletion. But a scientific consensus exists worldwide, that the problem is attributable to our industrial age. A man-made substance—chlorofluorocarbons has been implicated as a threat to the ozone layer in the stratosphere.

An ozone layer envelops and protects the Earth's surface from being bombarded by ultraviolet-B radiation in the stratosphere. Ultraviolet B radiation has been implicated as a cause of skin cancer, cataracts, and possibly depressing the body's immune system. Environmental impacts of increases in ultraviolet-B radiation, although not as well documented, may be severe.

Stratospheric ozone is a fragile natural resource.

Ozone plays an extremely important role in maintaining life as we know it today.

If all the ozone around the world was compressed into a pure gas, it would form a band only 3 millimeters thick. It makes up only a tiny portion of the entire atmosphere, but its' value is enormous.

While most chemicals have a lifetime measured in weeks or months, chloroflurocarbons can persist in the stratosphere for a century or more. Fifteen to fifty kilometers above the Earth's surface, intense ultraviolet radiation causes these substances to break apart releasing its' chlorine. Chlorine then reacts with oxygen, nitrogen, and hydrogen oxides. The net result is a reduction in the concentration of ozone while the chlorine remains. This ozone depleting reactions then occurs over and over again.

The more CFC emissions released, the more ozone deletion is expected to occur. Once CFC's are released to the atmosphere, there is little or nothing we can do to control ozone depletion. Ozone depletion will then continue long into the next century.

Past use of CFC's has already committed the world to some level of ozone depletion. Immediate steps must be taken to minimize these losses.

The United States has long been a leader in addressing environmental problems. The United States was the first country to take steps to address ozone depletion in the stratosphere. In 1978, the Environmental Protection Agency banned the use of nonessential uses of chlorofluorocarbons in aerosols. This action was followed in the Scandinavian countries, Switzerland and Canada.

The United States, with the help of several other countries, bought the world low-cost insurance policy. Critical time to gain the needed scientific understanding of the problem was obtained.

Now after almost a decade's reprieve, CFC use has rebounded to match the peak amounts of 10 years ago.

Recent discovery of an ozone hole over the Antarctic has once again heightened the need for action.

The United States once again took the lead in addressing the problem. At the first round of negotiations for a worldwide agreement to control chlorofluorocarbons, the United States advocated both near and long-term measures to address the problem. Certain other countries weren't even prepared to freeze production of all CFC's.

The U.S. action is forceful, but the worldwide community may not accept it.

The critical need is to develop and begin using safe alternative chemicals.

U.S. industry has come forward and expressed a willingness to move forward in the development of these safe alternatives.

The United States must lead the world to protect the stratosphere. The commitment and leadership shown to protect the environment that existed during the 1970's needs to move to the forefront of U.S. policy.

The development of safe alternatives through technology—forcing is more than an environmental issue, it is a competitive issue. U.S. industry needs to develop environmentally protective alternatives and to then reap the benefit of having a product the world needs.

The legislation being introduced today, requires production of chlorofluorocarbon 11, chloroflurocarbon 12, chloroflurocarbon 13, halon 1201, and halon 1311, be frozen at 1986 levels.

The total ozone depletion attributed to all chloroflurocarbons, or other ozone depleting chemicals, must then be reduced 25 per centum by 1991; 50 per centum by 1992, and 95 per centum by 1995.

In order to provide a clear market incentive to develop and use safe alternatives, the release of ozone depleting emissions shall be penalized. Penalties shall be based upon the ability of the chemical substance to deplete ozone. Penalties shall be phased in over a 5-year period to avoid any competitive advantage of using chemicals which threaten the stratosphere.

When U.S. stratospheric ozone depletion reaches 5 per centum of current levels, imports of chemicals and products containing these substances, or made with these substances, will be banned, unless the country has done as much to protect the environment as the United States has.

This legislation will lead to the protection of stratospheric ozone.

Mr. President, I ask unanimous consent that the bill and a summary be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

SECTION-BY-SECTION ANALYSIS OF STRATOSPHERIC PROTECTION ACT OF 1987

Section 1. Short Title.

Section 2. Congressional Findings. Includes findings that manufactured substances, such as chlorofluorocarbons, are polluting the atmosphere and may be contributing to the related environmental problems of stratospheric ozone depletion and global climate change due to the greenhouse effect; these related problems threaten human health and the environment on a global scale; it is necessary to control international trade in chlorofluorocarbons and

other ozone depleting substances to protect our global environment; and the United States needs to be the world leader in developing substitutes for these harmful chemicals.

Section 3. Objectives and National Goal. Establishes as a national goal, the elimination of atmospheric pollution from manufactured chemicals, such as chlorofluorocarbons.

Section 4. Definitions. Includes definiton of "household consumer equipment" and "medical purposes" that receive special consideration under Section 9, "stratospheric ozone depletion factor," "manufactured substance;" and "substances covered by this Act."

Section 5—Listing of Regulated Substances. There are two lists of regulated substances: (1) a priority list of chemicals whose production level is frozen at 1986 levels; and (2) a list of other chemicals with ozone depletion potential that must have ozone depletion reduced 95% over the next 8 years. The priority list includes the most popular and harmful chlorofluorocarbons (11, 12 and 113) and halons (1211 and 1301). The second list includes the chemicals listed on the priority list, plus other chemicals with ozone depletion potential including chlorofluorocarbons (22, 114 and 115); and carbon tetrachloride, methyl chloroform.

The production of chemicals on the second list is regulated and limited on the basis of overall ozone depletion potential. Since the regulated chemicals have differing, relative ozone depletion potential, producers are free to shift their production capacity from one substance to another, provided the total ozone depletion potential of chemicals manufactured by a producer is reduced significantly over the next eight years (to 5% of 1986 levels).

Section 6. Reporting. Producers of ozone depleting chemicals are required to submit annual reports to the EPA.

Section 7. Production Cap for Initial List. This section caps the priority list chemicals at 1986 production levels on January 1, 1988.

Section 8. Limitation on Ozone Depletion Potential. This section sets forth the 8 year reduction in overall production of ozone depleting substances mentioned earlier.

Section 9. Limitation on Use. Recognizing that (1) there may be some essential medical uses for these chemicals for which no safe alternative is expected to be developed, and (2) many people have recently purchased (or are planning to purchase) household appliances that require the use of these chemicals, the phase-out in Section 8 is limited to 95% of current ozone depletion potential and beginning in 1998, the chemicals that are produced in excess of this limitation can be used only for medical purposes and to service and maintain household appliances.

Section 10. Production Phase-out Exceptions. To encourage recapture, safe destruction and closed use, a production credit that can be used to increase the production limits of Section 8, is available upon proof of such destruction or continued containment. A national security exemption is provided for production and use of halon 1211 and halon 1301.

Section 11. Ozone Depletion Penalty. This section establishes a penalty for continued use of substances or practices contributing to ozone depletion, set at a level which will eliminate any competitive advantage of a competing substance.

Section 12. Labeling. All containers of, or products made with, substances covered by this Act must bear a warning label.

Section 13-17. Miscellaneous Provisions. On Federal Enforcement, Judicial Review, Citizen Suits, Separability, Relationship to Other Laws and Authority of Administrator.●

S. 570

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Stratosphere Protection Act of 1987".

SEC. 2. FINDINGS.

The Congress finds that—

(1) The best available scientific evidence shows that manufactured substances, including some chlorofluorocarbons, are polluting the atmosphere and may be contributing to the problems of stratospheric ozone depletion and thus allowing additional ultraviolet radiation to reach the earth's surface, contributing to global climate change, and other atmospheric modifications.

(2) No level of stratospheric ozone depletion or global climate change caused by human activities can be deemed safe.

(3) Stratospheric ozone depletion will lead to increased incidence of solar ultraviolet radiation at the surface of the Earth.

(4) Increased incidence of solar ultraviolet radiation is likely to cause increased rates of disease in humans (including increased rates of skin cancer), threaten food crops, and otherwise damage the natural environment.

(5) Stratospheric ozone depletion and global climate change from continued emissions of substances covered by this Act, including chlorofluoprocarbons and other halogenated carbons with ozone depleting potential, and emissions of other gases imperil human health and the environment worldwide.

(6) In order to stabilize and eventually reduce concentrations of chlorine and bromine in the stratosphere, to conserve the stratospheric ozone layer (an exhaustible natural resource), and to reduce the extent of global climate change, emissions of chlorofluorocarbons and other substances covered by this Act, including halogenated carbons with ozone depleting potential, should be terminated rapidly.

(7) The highest priority must be given to developing and deploying safe substitutes to replace ozone depleting substances within 8 years.

(8) The United States needs to develop and deploy safe substitutes to replace ozone depleting substances in order to demonstrate to the world its commitment to protect the stratosphere.

SEC. 3. OBJECTIVES AND NATIONAL GOAL.

(a) The objectives of this Act are to restore and maintain the chemical and physical integrity of the Earth's atmosphere and to protect human health and the global environment from all known and potential dangers due to atmospheric or climatic modification, including stratospheric ozone depletion, that is or may be related to the chlorofluorocarbons or other substances covered by this Act by—

(1) reducing significantly the production and emission into the atmosphere of pollutants caused by human activities,

(2) promoting the rapid development and deployment of safe alternatives to the use of the chlorofluorocarbons and other substances covered by this Act, and

(3) promoting additional scientific research on atmospheric or climatic modification, including stratospheric ozone depletion, and on the known and potential adverse effects therefrom on human health and the global environment.

(b) In order to achieve the objectives of this Act, it is the national goal to eliminate stratospheric emissions of manufactured substances with ozone depleting potential, including chlorofluorocarbons and other halogenated carbons with ozone depleting potential, and to reduce significantly emissions of other gases caused by human activities that are likely to affect adversely the global climate.

SEC. 4. DEFINITIONS.

As used in this Act:

(1) The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) The term "household consumer equipment" means manufactured products used in residences or personal property normally available for individual use including motor vehicles, farm equipment and otherwise non-commercial equipment.

(3) The term "medical purposes" means medical devices and diagnostic products (A) for which no safe substitute has been developed and (B) which, after notice and opportunity for public comment, has been approved and deemed essential by the Commissioner of the Food and Drug Administration, in consultation with the Administrator.

(4) The term "person" means an individual, corporation (including a government corporation), partnership, firm, joint stock company, trust, association, or any other private entity, or any officer, employee, agent, department, or instrumentality of the Federal Government, of any State or political subdivision thereof (including any international instrumentality.

(5) The term "stratospheric ozone depletion factor" means the numerical value representing the ozone depletion potential of such substance, on a mass (per kilogram) basis based upon the substances atmospheric lifetime, molecular weight of bromine and chlorine, and its ability to be photolytically disassociated.

(6) Manufactured substance means a chlorofluorocarbons or other halogenated carbon with ozone depleting potential of a particular molecular identity or any mixture, that has been manufactured for commercial purposes.

(7) The term "substances covered by this Act" means those substances which are known or may reasonable be anticipated to cause or contribute to atmospheric or climatic modification, including stratospheric ozone depletion, and are listed under subsections (a) or (b) of section 5.

SEC. 5. LISTING OF REGULATED SUBSTANCES.

(a) INITIAL LIST.—Within 60 days after enactment of this Act, the Administrator shall publish an initial list of manufactured substances which are known or may reasonably be anticipated to cause or contribute to atmospheric or climatic modification, including stratospheric ozone depletion. The initial list shall include chlorofluorocarbon-11, chlorofluorocarbon-12, chlorofluorocarbon-113, halon-1211, and halon-1301.

(b) OTHER REGULATED SUBSTANCES.—Simultaneously with publication of the priority list, the Administrator shall create a list of other manufactured substances which, in the judgment of the Administrator, meet the criteria set forth in the first sentence of subsection (a). The list of other substances shall be subject to the limitations on ozone depletion potential under section 9 of this act and shall include chlorofluorocarbon-22, chlorofluorocarbon-114, chlorofluorocarbon-115, carbon tetrachloride, methyl chloroform, and methylene chloride. At least annually thereafter, the Administrator shall publish a proposal to add to such list each other manufactured substance which, in the judgment of the Administrator, meets the criteria set forth in the first sentence of

subsection (a). Within 180 days of any such proposal, after allowing an opportunity for public comment, the Administrator shall promulgate a regulation adding each such substance to the list, unless the Administrator determines that such substance clearly does not meet the criteria set forth in the first sentence of subsection (a).

(c) OZONE DEPLETION FACTOR.—Simultaneously with publication of the lists or additions under this section, and at least annually thereafter, the Administrator shall assign to each listed substance a numerical value representing the ozone depletion potential of such substance, on a mass (per kilogram) basis, as compared with chlorofluorocarbon-11. The numerical value shall, for the purposes of section 9, constitute the ozone depletion factor of each such substance. Until the Administrator promulgates regulations under this subsection, the following ozone depletion factors shall apply:

substance	ozone depleting factor
chlorofluorocarbon-11	1.0
chlorofluorocarbon-12	0.9
chlorofluorocarbon-22	0.05
chlorofluorocarbon-113	0.78
chlorofluorocarbon-114	0.7
chlorofluorocarbon-115	0.4
carbon tetrachloride	1.06
methyl chloroform	0.10
methylene chloride	0.10
halon-1211	2.69
halon-1301	11.43

SEC. 4. REPORTING REQUIREMENTS.

(a) PRIORITY LIST.—Within 90 days after enactment of this Act, each person producing a substance listed pursuant to subsection (a) of section 5 shall file a report with the Administrator setting forth the amount of the substance that was produced by such person during calendar year 1986. Not less than annually thereafter, each producer shall file a report with the Administrator setting forth the production levels of such substance in each successive 12-month period until such producer cease production of the substance. Each such report shall be signed by a responsible corporate officer.

(b) ADDITIONS.—Within 90 days of the date on which a substance is placed on the list under subsection (b) of section 5, each person shall file a report with the Administrator setting forth the amount of the substance that was produced by such person during the 12 months preceding the date of listing. Not less than annually thereafter, each producer shall file a report with the Administrator setting forth the production levels of such substance in each successive 12-month period until such producer ceases production of the substance. Each such report shall be signed by a responsible corporate officer.

SEC. 7. PRODUCTION CAP FOR INITIAL LIST.

Effective January 1, 1988, it shall be unlawful for any person to produce a substance listed pursuant to subsection (a) of section 5 in a quantity greater than that produced by such person during calendar 1986.

SEC. 8. LIMITATION ON OZONE DEPLETION POTENTIAL.

Effective January 1, 1995, it shall be unlawful for any person to produce any substance in a quantity which when multiplied by the ozone depletion factor for such substance would result in a quantity which would allow the total chloroflurocarbon or other halogenated carbon ozone depletion potential to exceed 5 per centum of the level of ozone depletion attributable to total United States production for 1986 for substances identified in subsection (C) of section 5.

(b) The Administrator shall promulgate regulations under subsection (c), limiting production of a substance listed pursuant to subsection (b) of section 5, using the 1986 production level reported by each producer to the Administrator under section 6 multiplied by the substances stratospheric ozone depletion factor, in order to reduce stratospheric ozone depletion potential of such substance.

(1) 25 per centum effective January 1, 1989;

(2) 50 per centum effective January 1, 1991;

(3) 95 per centum effective January 1, 1995;

(c) The Administrator shall promulgate regulations, after notice and opportunity for public comment, which requires each producer to reduce its production of

(1) a substance listed under subsection (a) of section 5 more rapidly than the schedule provided under this Act; or

(2) a substance listed under subsection (b) of section 5 on a specific schedule not otherwise provided for in this Act

if the Administrator determines that such revised or specific schedule (A) based on new information regarding the harmful effects on the stratosphere or climate which may be associated with a listed substance, is necessary to protect human health and the environment or (B) based on the availability of substitutes for a listed substance, is attainable. Any person may petition the Administrator to issue such regulations. The Administrator shall issue such regulations within 180 days after receipt of any such petition, unless the Administrator denies the petition.

SEC. 9 LIMITATION ON USE.

Effective on the date 12 months after the production of a substance listed under section 5 is required to be reduced as set forth in subsection (b)(3) of section 9, it shall be unlawful to introduce into commerce or to use such listed substance above regulated quantities except for medical purposes approved by Consumer Food and Drug Administration in consultation with the Administrator for which no safe substitute has been developed and, for a period not to exceed 10 years after the date on which such production is required to be reduced under subsection (b)(3) of section 8 to maintain and service household consumer equipment.

SEC. 10. PRODUCTION PHASE-OUT EXCEPTIONS.

(a) RECOVERY AND DESTRUCTION.—Upon application by an interested person, and after notice and opportunity for public comment, the Administrator may permit such person to produce a substance listed under section 5 during a 12 month period in a specified quantity that exceeds the applicable quantity limitations set forth in sections 7 and 9 if the applicant demonstrates to the Administrator by clear and convincing evidence that such specified quantity has been offset by an equal quantity of such listed substance which has been recovered and destroyed from products in use. A substance recovered for resale shall not be considered new production for purposes of this Act.

(b) NATIONAL SECURITY.—The President may issue such orders regarding production and use of halon-1211 and halon-1301 at any specified site or facility as may be necessary to protect the national security interests of the United States if the President finds that adequate substitutes are not available and that the production and use of such substance is necessary to protect such national security interests. Such orders may include, where necessary to prptect such interests, an exemption from any requirement contained in this Act. The President shall notify the Congress within 30 days of the issuance of an order under this paragraph providing for any such exemption. Such notification shall include a statement of the reasons for the granting of the exemption. An exemption under this paragraph shall be for a specified period which may not exceed one year. Additional exemptions may be granted, each upon the President's issuance of a new order under this paragraph. Each such additional exemption shall be for a specified period which may not exceed one year. No exemption shall be granted under this paragraph due to lack of appropriation unless the President shall have specifically requested such appropriation as a part of the budgetary process and the Congress shall have failed to make available such requested appropriation.

(c) CLOSED USE.—Upon application by an interested person, and after notice and opportunity for public comment, the Administrator may permit such person to produce a specified quantity of a listed substance, during a 12 month period, that exceeds the applicable quantity limitations set forth in sections 8 if the applicant demonstrates to the Administrator by clear and convincing evidence that such quantity will be contained for reuse and therefore never available for release to the environment except in de minimis amounts. Any such amount released shall be counted by the Administrator in calculating available ozone depletion under subsection b of section 8.

SEC. 11. OZONE DEPLETION PENALTY.

After notice and opportunity for public comment, but not later than 12 months after the date of enactment, the Administrator shall provide for the imposition and collection of a penalty for the continued use of substances or practices which have been listed pursuant to the provisions of this Act or otherwise identified as causing or contributing to ozone depletion.

(b) Such penalty, together with accumulated interest and fees, shall begin to accrue 12 months from the date of enactment, the date of proposed listing, or the date of identification, whichever is later, against any person who produces or imports—

(A) a substance, product or good identified or listed pursuant this Act;

(B) a substance, product or good manufactured or derived from in whole or any part, a substance or practice identified or listed pursuant to this Act.

(c) Such penalty shall be that amount which, when added to the price received by the producer or importer, will eliminate any competitive advantage, whether in terms of price, quality, or otherwise, taking into account the capability of the substance to deplete ozone, such substance, product, service or good would have against a competing substance, product, service or good which does not utilize a substance or practice identified or listed pursuant to this Act as causing or contributing to ozone depletion. The penalty shall be phased-in over a five year period beginning at a rate one-fifth of the amount determined to eliminate any competitive advantage. Provided, however, any substance with an ozone depletion factor equal to or less than .1 shall not be subject to such penalty.

(d) Penalties shall—

(A) be paid to the United States Treasury;

(B) be paid at least monthly;

(C) be imposed and collected by a court of law in the event timely action is not taken to implement the provisions of this section or any other provision of this Act, by the Administrator or any other officer of the Executive Branch; and,

(D) not be waived or reduced in any amount due to delay in listing, identifica-

tion, promulgation, calculation, publication under the other provisions of this Act.

SEC. 12. CERTIFICATION OF EQUIVALENT PROGRAMS.

(a) IMPORTS.—Effective January 1, 1988, it shall be unlawful for any person to import such substance, any product containing such substance, or any product manufactured with a process that uses such substance listed under section 5 unless the Administrator, in consultation with the Secretary of State (the Secretary), has published a decision, after notice and opportunity for public comment, certifying that the nations in which such substance or product is manufactured and from which such substance or product is imported have established and are fully implementing programs that have reduced production of such listed substance on a schedule that is at least as stringent as the reduction schedule for domestic production which applies under this Act. The prohibition on the import of any product manufactured with a process that uses a substance listed under section 5 shall include, after notice and opportunity for public comment, any product which the Administrator has reason to believe was manufactured with a process that uses such substance. The Administrator's decison that a product was manufactured with a process that uses such substance shall constitute a rebuttable presumption.

(b) IMPORT CONSULTATIONS.—In order to provide early opportunity for compliance with this provision, the Administrator shall notify each nation subject to this provision by January 1, 1988 of the requirements of this Act. The Administrator shall then undertake consultations in order to insure such nations are establishing and fully implementing programs that are reducing production of such listed substances on a schedule that is at least as stringent as the reduction schedule for domestic production which applies under this Act.

(c) CERTIFICATION OF NATIONAL PROGRAMS.—The Administrator shall not certify any national program under subsection (a) unless it is determined that—

(1) the nation has adopted legislation or regulations which give the reduction schedule for each listed substance the force or law; and

(2) the legislation or regulations include reporting and enforcement requirements no less stringent than those specified in sections 6 and , and that the information contained in such reports is available to the Administrator and the Secretary.

(d) REVOCATION.—At least annually, the Administrator, in consultation with the Secretary, shall review each certification made under this section and shall revoke such certification, after notice and opportunity for public comment, unless it is determined that the conditions of subsections (a) and (b) remain satisfied and that the reduction schedule for each listed substance is in fact being carried out in such nations. Any such revocation shall take effect 180 days after notice of the revocation has been published.

(e) ALLOCATION.—Any person who imports a substance covered by this Act or a product containing such substance shall, for the purposes of section 7 (production phase-out for priority list) and section 9 (limitation on ozone depletion potential), shall be deemed to have produced an equivalent amount of such substance on the date of such importation.

SEC. 13. LABELLING.

(a) Effective 18 months after the date on which a substance is placed on the list maintained under section 5, no container in which such substance is stored or transported, no product containing such substance, and no product manufactured with a process that uses a listed substance shall be introduced into commerce in the United States unless it bears a label stating either of the following, as appropriate:

(1) 'Contains (insert name of listed substance) a substance which may harm public health and environment by destroying ozone in the upper atmosphere and by disrupting the climate'.

(2) 'Manufactured with (insert name of listed substance), a substance which may harm public health and environment by destroying ozone in the upper atmosphere and by disrupting the climate'.

The Administrator shall issue regulations to implement the labelling requirements of this section within one year after enactment of this section, after notice and opportunity to comment. Such regulations shall require all containers and products subject to this section which are introduced or reintroduced into commerce later than 90 days after promulgation to bear the appropriate label.

SEC. 14. PROHIBITED ACTS AND PENALTIES; ENFORCEMENT.

(a) COMPLIANCE ORDERS.—(1) Whenever on the basis of any information the Administrator determines that any person has violated or is in violation of any requirement of this Act, the Administrator may issue an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified time period, or both, or the Administrator may commence a civil action in the United States district court in the district in which the violation occurred for appropriate relief, including a temporary or permanent injunction.

(2) Any order issued pursuant to this subsection may include a suspension or revocation of any permit issued by the Administrator under this Act and shall state with reasonable specificity the nature of the violation. Any penalty assessed in the order shall not exceed $25,000 per day of noncompliance for each violation of a requirement of this Act. In assessing such a penalty, the Administrator shall take into account the seriousness of the violation and any good faith efforts to comply with applicable requirements.

(b) PUBLIC HEARING.—Any order issued under this section shall become final unless, no later than thirty days after the order is served, the person or persons named therein request a public hearing. Upon such request the Administrator shall promptly conduct a public hearing. In connection with any proceeding under this section the Administrator may issue subpenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and may promulgate rules for discovery procedures.

(c) VIOLATION OF COMPLIANCE ORDERS.—If a violator fails to take corrective action within the time specified in a compliance order, the Administrator may assess a civil penalty of not more than $25,000 for each day of continued noncompliance with the order and the Administrator may suspend or revoke any permit issued to the violator.

(d) CRIMINAL PENALTIES.—Any person who—

(1) knowingly exceeds the production limits under section 7 (production phase-out for initial list) or section 9 (limitation on ozone depletion potential);

(2) knowingly introduces into interstate commerce a substance that was produced in violation of section 7 or section 9;

(3) knowingly imports a substance listed under subsection (a) of section 5, a product containing such substance, or a product manufactured with a process that uses such substance, in violation of section 11 (certification of equivalent programs);

(4) knowingly introduces into interstate commerce a substance or product in violation of section 8 (limitation on use) or section 12 (labelling);

(5) knowing omits material information or makes any false material statement or representation in any application, record, report, permit, or other document filed, maintained, or used for purposes of compliance with this Act; or

(6) knowing produces, transports, distributes, or uses any substance listed under section 5, a product containing such substance, or a product manufactured with a process that uses such substance, and who knowingly destroys, alters, conceals, or fails to file any record, application, report, or other document required to be maintained or filed for purposes of compliance with this Act,

shall, upon conviction, be subject to a fine in accordance with title 18 of the United States Code for each day of violation, or imprisonment not to exceed two years, or both. If conviction is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment under the respective paragraph shall be doubled with respect to both fine and imprisonment.

(e) CIVIL PENALTY.—Any person who violates any requirement of this Act shall be liable to the United States for a civil penalty in an amount not to exceed $25,000 for each such violation.

(f) VIOLATIONS.—Each day of violation of any requirement of this Act shall, for purposes of this section, constitute a separate violation. In addition, for purposes of section 7 (production phase-out for initial list), section 8 (limitation on use), section 9 (limitation on ozone depletion potential), and paragraphs (1), (2), (3), and (4) of subsection (d) of this section, the production, introduction into commerce, or importation of each 100 pounds of a substance listed under subsection (a) of section 5 that is in excess of the production limits under section 7 or section 9 shall constitute a separate violation.

SEC. 15. JUDICIAL REVIEW OF FINAL REGULATIONS AND CERTAIN PETITIONS.

Any judicial review of final regulations promulgated pursuant to this Act and the Administrator's denial of any petition for the promulgation, amendment, or repeal of any regulation under this Act shall be in accordance with sections 701 through 706 of title 5 of the United States Code, except that—

(1) a petition for review of action of the Administrator in promulgating any regulation, or requirement under this Act or denying any petition for the promulgation, amendment or repeal of any regulation under this Act may be filed by any interested person in the Circuit Court of Appeals of the United States for the Federal judicial district in which such person resides or transacts business, and such petition shall be filed within ninety days from the date of such promulgation or denial or after such date if such petition is for review based solely on grounds arising after such ninetieth day; action of the Administrator with respect to which review could have been obtained under this subsection shall not be subject to judicial review in civil or criminal proceedings for enforcement; and

(2) in any judicial proceeding brought under this section in which review is sought of a determination under this Act required to be made on the record after notice and opportunity for hearing, if a party seeking review under this Act applies to the court

for leave to adduce additional evidence, and shows to the satisfaction of the court that the information is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the Administrator, and to be adduced upon the hearing in such manner and upon such terms and conditions as the court may deem proper; the Administrator may modify administrative findings as to the facts, or make new findings, by reason of the additional evidence so taken, and shall file with the court such modified or new findings and the Administrator's recommendation, if any, for the modification or setting aside of the original administrative order, with the return of such additional evidence.

SEC. 16. CITIZEN SUITS.

(a) IN GENERAL.—Except as provided in subsection (b) or (c) of this section, any person may commence a civil action on his own behalf—

(1) against any person (including (a) the United States, and (b) any other governmental instrumentality or agency, to the extent permitted by the eleventh amendment to the Constitution) who is alleged to be in violation of any permit, regulation, condition, requirement, prohibition, or order which has become effective pursuant to this Act; or

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this Act which is not discretionary with the Administrator.

Any action under paragraph (a)(1) of this subsection shall be brought in the district court for the district in which the alleged violation occurred. Any action brought under paragraph (a)(2) of this subsection may be brought in the district court for the district in which the alleged violation occurred or the District Court of the District of Columbia. The district court shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce the permit, regulation, condition, requirement, prohibition, or order, referred to in paragraph (1), to order such person to take such other action as may be necessary, or both, or to order the Administrator to perform the act or duty referred to in paragraph (2), as the case may be, and to apply any appropriate civil penalties under section ——.

(b) ACTIONS PROHIBITED.—No action may be commenced under subsection (a)(1) of this section—

(A) prior to 60 days after the plaintiff has given notice of the violation to—

(i) the Administrator;

(ii) the State in which the alleged violation occurs; and

(iii) to any alleged violator of such permit, standard, regulation, condition, requirement, prohibition, or order; or

(B) if the Administrator or State has commenced and is diligently prosecuting a civil or criminal action in a court of the United States or a State to require compliance with such permit, regulation, condition, requirement, prohibition, or order. In any action under subsection (a)(1) in a court of the United States, any person may intervene as a matter of right. Any action respecting a violation under this Act may be brought under this section only in the judicial district in which such alleged violation occurs.

(c) NOTICE.—No action may be commenced under paragraph (a)(2) of this section prior to 60 days after the plaintiff has given notice to the Administrator that he will commence such action. Notice under this subsection shall be given in such manner as the Administrator shall prescribe by regulation.

(d) INTERVENTION.—In any action under this section the Administrator, if not a party, may intervene as a matter of right.

(e) COSTS.—The court, in issuing any final order in any action brought pursuant to this section or section 14, may award costs of litigation (including reasonable attorney and expert witness fees) to the prevailing or substantially prevailing party, whenever the court determines such an award is apprppriate. The court may, if a temporary restraining order or preliminary injunction is sought, require the filing of a bond or equivalent security in accordance with the Federal Rules of Civil Procedure.

(f) OTHER RIGHTS PRESERVED.—Nothing in this section shall restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any standard or requirement or to seek any other relief (including relief against the Administrator or a State agency).

SEC. 17. SEPARABILITY.

If any provision of this Act, or the application of any provision of this Act to any person or circumstances, is held invalid, the application of such provision to other persons or circumstances, and the remainder of this Act, shall not be affected thereby.

SEC. 18. RELATIONSHIP TO OTHER LAWS.

(a) Nothing in this Act shall be construed to alter or affect the authority of the Administrator under the Clean Air Act or the Toxic Substances Control Act or to affect the authority of any other department, agency, or instrumentality of the United States under any provision of law to promulgate or enforce any requirement respecting the control of any substance, practice, process, or activity for purposes of protecting the stratosphere or ozone in the stratosphere.

(b) Nothing in this Act shall preclude or deny any State or political subdivision thereof from adopting or enforcing any requirement respecting the control of any substances, practice, process, or activity for purposes of protecting the stratosphere or zone in the stratosphere.

SEC. 19. AUTHORITY OF ADMINISTRATOR.

Mr. MITCHELL. I am pleased to join my colleagues in introducing vitally important legislation. The Stratospheric Protection Act, the Stratospheric Ozone and Climate Protection Act, and the Senate concurrent resolution on chlorofluorocarbons address one of our most complex, long-term environmental problems. These measures would protect not merely a single resource or ecosystem, but the atmosphere and the climate on a global scale.

Chlorofluorocarbons [CFC's] threaten the very ability of planet Earth to support life as we know it by depleting the protective ozone layer in the stratosphere. Increased ultraviolet radiation penetrating to the Earth's surface will increase the risk of cancer and create as yet undetermined effects on other plant and animal life.

CFC's also are among the strongest of the so-called greenhouse gases which contribute to the problems of global warming. The continuing build-up of CFC's, carbon dioxide and other trace gases in the atmosphere caused by human activities will trap the heat radiating from the Earth's surface. the increased heat will lead to warming of the Earth and dramatic changes in the climate that are potentially the most serious and far-reaching environmental problems humankind has encountered. The scientific facts now leave no doubt about the validity of the geeenhouse theory, and no doubt about the certain change it will bring to planet Earth.

While the specific regional impacts and the precise timing and magnitude of the chahges are not fully understood, there is no doubt about what is in store for us. The potential effects include dislocation of agricultural regions due to changes in growing seasons and precipitation, negative impacts on plants and animals, and rising sea level from melting glaciers. There may also be increased variability in the climate, or more extreme weather—increasingly frequent droughts, coastal storms, flooding, and even unusually harsh winters.

On January 28, Senator BAUCUS and I chaired a hearing in the Senate on the issues of the greenhouse effect, climate change, and ozone depletion. A panel of eminent atmospheric chemists and geophysicists testified on the greenhouse effect. Their testimony reflects the latest findings from the scientific community.

Dr. Ralph Cicerone of the National Center for Atmospheric Research confirmed that the atmospheric concentrations of greenhouse gases are continuing to increase. He cited evidence that carbon dioxide has increased 25 percent during the century since the preindustrial era, reaching the highest levels in 40,000 years. He also concluded that this increase is almost certainly due to burning of fossil fuels, with some contribution from deforestation. Dr. Cicerone explained that the combined effect of other trace gases such as methane, ozone and chlorofluorocarbons is now known to be contributing equally to the greenhouse effect.

Dr. V. Ramanathan of the University of Chicago testified that we are already committed to a global warming of up to 2 °C from the increased gases added to the atmosphere since 1850. In other words, even if action were taken tomorrow to limit future emissions of these gases, we have already set in motion a significant temperature and climate change. It has been 8,000 years since the Earth has been 1 °C warmer than the present and 70 million years since the average global temperature was 5 °C warmer than today. His testimony indicates the unprecedented magnitude of the predicted climate changes.

Dr. Tom Wigley, a visiting British scientist from the University of East Anglia, presented the results of his study of temperature records over the past 100 years. He concluded that the Earth has warmed 0.5 °C—almost 1 degree Fahrenheit—in the past 100 years. Recently, the warming trend

has been very rapid, with 1981 and 1983 the 2 warmest years in the entire record. He testified that this magnitude of warming is consistent with greenhouse predictions. He believes that this warming represents the first signal of the greenhouse effect.

Dr. Wallace Broecker of Columbia University's Lamont-Doherty Geological Observatory testified that climate changes in response to the greenhouse effect may occur as sudden jumps rather than gradual trends. The timing and magnitude of such dramatic changes would be unpredictable, severely limiting our ability to cope and adapt.

Recently, two industry publications gave extensive coverage to the problems of the greenhouse effect and climate change—Chemical and Engineering News, published by the American Chemical Association, and the Electric Power Research Institute's EPRI Journal. Further recognition of the seriousness of these global environmental problems is summarized well by Lee Thomas, Administrator of the U.S. Environmental Protection Agency, who said that

> * * * if we wait until health and environmental problems are manifest it might be too late to take adequate steps to address these problems. We must realize that there will always be scientific uncertainty associated with these complex problems. We will have to be prepared to act despite these uncertainties.

Reductions in the use of CFC's will protect the stratosphere from ozone depletion, and perhaps even more importantly help in delaying global warming. The greenhouse effect, and climate change, as well as ozone depletion, are real and practical concerns for the condition of this planet within our lifetimes. The importance of the initial step we are taking today with the introduction of this legislation cannot be overstated.

By Mr. CHAFEE (for himself, Mr. BAUCUS, Mr. STAFFORD, Mr. MITCHELL, Mr. DURENBERGER, Mr. GORE, Mr. WIRTH, and Mr. REID):

S. 571. A bill to reduce atmospheric pollution to protect the stratosphere from ozone depletion, and for other purposes; to the Committee on Environment and Public Works.

STRATOSPHERIC OZONE AND CLIMATE PROTECTION ACT

● Mr. CHAFEE. Mr. President, I rise today to introduce the Stratospheric Ozone and Climate Protection Act of 1987 on behalf of myself and Senators BAUCUS, STAFFORD, MITCHELL, DURENBERGER, GORE, and WIRTH. My statement is also offered in support of two other measures being introduced today by several of us: Senator BAUCUS' bill, the Stratosphere Protection Act of 1987; and the Senate concurrent resolution being introduced by Senator WIRTH on international negotiations to protect the ozone layer.

Before I go any further, a point of clarification is needed. Many of us have been hearing about the Clean Air Act and the problems of "ozone nonattainment." We hear about our cities being plagued with too much ozone. Well, all of us need to recognize that there are two types of ozone problems: There is the ozone nonattainment problem—too much smog in the lower atmosphere—the troposphere; and there is the ozone depletion problem—too little ozone in the upper atmosphere—the stratosphere. The subject of the legislation being introduced today is the ozone depletion problem.

Last summer we held hearings on the related problems of ozone depletion and the global climate change that will result from a phenomenon known as the greenhouse effect. These are complicated environmental problems that, due to the global nature and predicted effects, present a greater challenge than any environmental problem we have ever had to deal with.

This is not a matter of Chicken Little claiming the sky is falling. The scientists at our hearings told us we have a problem, a serious problem.

Their message, and the conclusion I have come to after reviewing other sources, is this: The continued use of chlorofluorocarbons [CFC's] is likely to lead to depletion of the Earth's protective stratospheric ozone layer. The effects of this depletion will strike at the very core of everyone's health and environmental well-being. Increased skin cancers, suppression of the immune response system, reduced crop yields, and loss of aquatic species are just some of the dangers that lie ahead if we fail to act.

In the few months since those hearings, the news from the scientific community has only added to my concern. More sophisticated computer models of our atmosphere show that future increases in emissions of chlorofluorocarbons [CFC's] would lead to greater than previously expected ozone depletion at latitudes that include the northern United States and much of Europe. In addition, preliminary data from a NASA satellite shows that a hole may also be occurring over the Arctic during the spring season—similar to but smaller than the one known to exist over the Antarctic—and a small but significant reduction in global stratospheric ozone levels may have occurred during the past several years.

When discussing the related environmental threats of ozone depletion and the greenhouse effect, you can't help but take note of one common element: That is the fact that CFC's have been identified as a culprit in both instances; they contribute to both problems.

While we recognize that many scientific uncertainties remain, we must also recognize our responsibility to act in a prudent manner to safeguard the well-being of our planet and its inhabitants.

It has now been over 12 years since the first warning about the dangers of CFC's and ozone depletion. A considerable body of scientific evidence has reinforced that warning. Do we continue to expand our reliance on CFC's while we wait for even more evidence, further placing in jeopardy the very future of our planet, or do we act now to safeguard the ozone layer for our and future generations?

Given the magnitude of the health and environmental risks involved, a plan that leads to the eventual elimination of ozone-depleting chemicals from global commerce is the only acceptable solution. Limited growth or maintenance of current levels of use are unacceptable.

Efforts to preserve our ozone layer transcend narrow interests. We must all accept responsibility for preserving our Earth's basic life support systems.

Last October, I spoke on the Senate floor of the need to impose controls on the production and release of CFC's. At that time, I noted that international negotiations were underway, stressed my preference for resolving the problems of CFC's in that forum; and stated my intention to introduce legislation that will impose domestic controls and restrictions on international trade.

Today, we are here for three reasons:

First, to announce our continued support for the international process and the well-founded U.S. position that was put together by EPA and the State Department. These two agencies, and particularly Lee Thomas, Administrator of the EPA, and Richard Benedick, Deputy Assistant Secretary of State who heads up the U.S. delegation, should be commended for getting this administration to press for an immediate freeze and scheduled phaseout of all fully halogenated CFC's.

Second, to stress that, to be acceptable to Congress, an international agreement must provide for reductions, not just a freeze on production of CFC's.

And third, to introduce legislation on CFC's.

In addition to the resolution on the international negotiations scheduled for next week in Vienna, we are introducing two bills that will phase out the domestic production, importation, and use of harmful CFC's and other chemicals containing chlorine or bromine that the scientists tell us can deplete the ozone layer.

The bill that I have authored, the Stratospheric Ozone and Climate Protection Act of 1987, has three main elements:

First, it provides for a statutory, 6-year, 95-percent phaseout of the most suspect chemicals—CFC 11, 12, 113 and halon 1211 and 1301;

Second, it includes a regulatory program for an 8-year, 95-percent reduction of overall ozone depleting potential that will force producers to shift, reduce, or eliminate the other substances that are identified as

having the potential to deplete the ozone layer—these include methylene chloride, carbon tetrachloride, and methyl chloroform; and

Third, in 12 months, importation of the most suspect chemicals, and products made with or containing those chemicals will be prohibited unless EPA certifies that the country of origin is on a phaseout schedule similar to ours.

The bill authored by Senator BAUCUS, the Stratosphere Protection Act of 1987, has the same goal—the elimination of chemicals that can deplete the ozone layer—but suggests a different approach. Senator BAUCUS and I have worked closely together on these bills and many of the differences are designed to focus the debate and elicit testimony on specific issues.

My preference is still that this global problem be dealt with by way of an international agreement. For this reason, we will not press for consideration of our legislation unless and until it becomes obvious that the ongoing negotiations will not produce an acceptable agreement.

Nevertheless, if it appears that this round of negotiations is not likely to produce a strong protocol phasingout fully halogenated CFC's, as Members of Congress, it is my firm conviction, we will have to reassert our role as national decisionmakers and move legislation forward to require unilateral action leading to the phaseout of such CFC's.

I recognize that unilateral action has both advantages and disadvantages. It would provide an early incentive for our domestic industry to begin work on producing alternative chemicals which would not adversely affect the ozone layer and could be used to replace CFC's. It is my understanding that such chemical substitutes are possible, but would take approximately 6 years to develop and would cost consumers a few pennies more. This seems like a small price to pay for protecting the important stratospheric ozone layer. By moving toward the development of these safer chemicals now, our industry would get the jump on its competition abroad.

To protect our environment and our domestic industry in the near term, I have included in my legislation a provision which some call trade barriers. To me, a prohibition on the importation of products that are made with or contain materials that could not be used in this country is not a trade barrier, it is a legitimate means of protecting our environment. Call it what you will, countries that wish to trade with us will have to abide by our rules for protecting our environment.

If it becomes necessary, we will face up to our responsibilities. We will press forward, combine the best features of the two bills, and lead the world by example. As a major consumer of products that use CFC's, we can make a significant difference to the environment if we stop making them and refuse to import them. As mentioned earlier, we have the rare opportunity to gain a competitive advantage by being environmentally sensitive.

Ironically, I hope there is no need for us to consider this legislation. My sincere wish is to see the international negotiations succeed. Such a result would be more effective and efficient.

Mr. President, I ask unanimous consent that a section-by-section analysis of my bill and the text of the bill be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

S. 571

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Stratospheric Ozone and Climate Protection Act of 1987".

SEC. 2. FINDINGS.

The Congress finds that—

(1) The best-available scientific evidence shows that manufactured substances, including some chlorofluorocarbons, are polluting the atmosphere and may be contributing to the problems of stratospheric ozone depletion, global climate change, and other atmospheric modifications.

(2) No level of stratospheric ozone depletion or global climate change caused by human activities can be deemed safe.

(3) Stratospheric ozone depletion will lead to increased incidence of solar ultraviolet radiation at the surface of the Earth.

(4) Increased incidence of solar ultraviolet radiation is likely to cause increased rates of disease in humans (including increased rates of skin cancer), threaten food crops, and otherwiser damage the natural environment.

(5) Stratospheric ozone depletion and global climate change from continued emissions of substances covered by this Act, including chlorofluorocarbons and other halogenated carbons with ozone depleting potential, and emissions of other gases imperil human health and the environment worldwide.

(6) In order to stabilize and eventually reduce concentrations of chlorine and bromine in the stratosphere, to conserve the stratospheric ozone layer (an exhaustible natural resource), and to reduce the extent of global climate change—

(A) emissions of chlorofluorocarbons and other substances covered by this Act, including halogenated carbons with ozone depleting potential, should be terminated rapidly, and

(b) it is necessary to control international trade in substances covered by this Act and products containing or made with processes that use such substances.

(7) The highest priority must be given to developing and deploying safe substitutes to replace ozone depleting substances within 6 years.

(8) The United States needs to develop and deploy safe substitutes to replace ozone depleting substances in order to demonstrate to the world its committment to protect the stratosphere.

SEC. 3. OBJECTIVES AND NATIONAL GOAL.

(a) The objectives of this Act are to restore and maintain the chemical and physical integrity of the Earth's atmosphere and to protect human health and the global environment from all known and potential dangers due to atmospheric or climatic modification, including stratospheric ozone depletion, that is or may be related to the chlorofluorocarbons or other substances covered by this Act by—

(1) reducing significantly the production and emission into the atmosphere of pollutants caused by human activities,

(2) promoting the rapid development and deployment of safe alternatives to the use of the chlorofluorocarbons and other substances covered by this Act, and

(3) promoting additional scientific research on atmospheric or climatic modification, including stratospheric ozone depletion, and on the known and potential adverse effects therefrom on human health and the global environment.

(b) In order to achieve the objectives of this Act, it is the national goal to eliminate atmospheric emissions of manufactured substances with ozone depleting potential, including chlorofluorocarbons and other halogenated carbons with ozone depleting potential, and to reduce significantly emissions of other gases caused by human activities that are likely to affect adversely the global climate.

SEC. 4. DEFINITIONS.

As used in this Act:

(1) The term "Administrator" means the Administrator of the Environmental Protection Agency.

(2) The term "household appliances" means noncommercial personal effects, including air conditioners, refrigerators, and motor vehicles.

(3) The term "import" means to land on, bring into, or introduce into, or attempt to land on, bring into, or introduce into, any place subject to the jurisdiction of the United States, whether or not such landing, bringing, or introduction constitutes an importation within the meaning of the customs laws of the United States.

(4) The term "manufactured substances" means any organic or inorganic chemical substances of a particular molecular identity, or any mixture, that has been manufactured for commercial purposes.

(5) The term "medical purposes" means medical devices and diagnostic products (A) for which no safe substitute has been developed and (B) which, after notice and opportunity for public comment, has been approved and deemed essential by the Commissioner of the Food and Drug Administration, in consultation with the Administrator.

(6) The term "person" means an individual, corporation (including a government corporation), partnership, firm joint stock company, trust, association, or any other private entity, or any officer, employee, agent, department, or instrumentality of the Federal Government, or any State or political subdivision thereof (including any interstate body), or of any foreign government (including any international instrumentality).

(7) The term "substances covered by this Act" means those substances which are known or may reasonable be anticipated to cause or contribute to atmospheric or climatic modification, including stratospheric ozone depletion, and are listed under subsections (a) or (b) of section 5.

SEC. 5. LISTING OF REGULATED SUBSTANCES.

(a) SUBSTANCES TO BE PHASED OUT.—Within 60 days after enactment of this Act, the Administrator shall publish a priority list of manufactured substances which are known or may reasonably be anticipated to cause or contribute to atmospheric or climatic modification, including stratospheric ozone depletion. The initial list shall include

chlorofluorocarbon-11, chlorofluorocarbon-12, chlorofluorocarbon-113, halon-1211, and halon-1301.

(b) OTHER REGULATED SUBSTANCES.—Simultaneously with publication of the priority list, the Administrator shall create a list of other manufactured substances which, in the judgment of the Administrator, meet the criteria set forth in the first sentence of subsection (a). The list of other substances shall be subject to the limitations on ozone depletion potential under section 9 of this Act and shall include chlorofluorocarbon-22, chlorofluorocarbon-114, chlorofluorocarbon-115, carbon tetrachloride, methyl chloroform, and methylene chloride. At least annually thereafter, the Administrator shall publish a proposal to add to such list each other manufactured substance which, in the judgment of the Administrator, meets the criteria set forth in the first sentence of subsection (a). Within 180 days of any such proposal, after allowing an opportunity for public comment, the Administrator shall promulgate a regulation adding each such substance to the list, unless the Administrator determines that such substance clearly does not meet the criteria set forth in the first sentence of subsection (a).

(c) OZONE DEPLETION FACTOR.—Simultaneously with publication of the lists or additions thereto under this section, and at least annually thereafter, the Administrator shall assign to each listed substance a numerical value representing the ozone depletion potential of such substance, on a mass (per kilogram) basis, as compared with chlorofluorocarbon-11. The numerical value shall, for the purposes of section 9, constitute the ozone depletion factor of each such substance. Until the Administrator promulgates regulations under this subsection, the following ozone depletion factors shall apply:

Substance:	*ozone depleting factor*
chlorofluorocarbon-11	1.0
chlorofluorocarbon-12	1.0
chlorofluorocarbon-22	0.05
chlorofluorocarbon-113	0.78
carbon tetrachloride	1.06
methly chloroform	0.10
halon-1211	2.69
halon-1301	11.43

SEC. 6. REPORTING REQUIREMENTS.

(a) PRIORITY LIST.—Within 90 days after enactment of this Act, each person producing a substance listed pursuant to subsection (a) of section 5 shall file a report with the Administrator setting forth the amount of the substance that was produced by such person during calendar year 1986. Not less than annually thereafter, each producer shall file a report with the Administrator setting forth the production levels of such substance in each successive 12-month period until such producer ceases production of the substance. Each such report shall be signed by a responsible corporate officer.

(b) OTHER REGULATED SUBSTANCES.—Within 90 days of the date on which a substance is placed on the list under subsection (b) of section 5, each person shall file a report with the Administrator setting forth the amount of the substance that was produced by such person during the 12 months preceding the date of listing. Not less than annually thereafter, each producer shall file a report with the Administrator setting forth the production levels of such substance in each successive 12-month period until such producer ceases production of the substance. Each such report shall be signed by a responsible corporate officer.

SEC. 7. PRODUCTION PHASE-OUT FOR PRIORITY LIST.

(a) Effective January 1, 1988, it shall be unlawful for any person to produce a substance listed pursuant to subsection (a) of section 5 in annual quantities greater than that produced by such person during calendar year 1986.

(b) Effective January 1, 1989, it shall be unlawful for any person to produce a substance listed pursuant to subsection (a) of section 5 in annual quantities greater than 75 per centum of that produced by such person during calendar year 1986.

(c) Effective January 1, 1991, it shall be unlawful for any person to produce a substance listed pursuant to subsection (a) of section 5 in annual quantities greater than 50 per centum of that produced by such person during calendar year 1986.

(d) Effective January 1, 1993, it shall be unlawful for any person to produce a substance listed pursuant to subsection (a) of section 5 in annual quantities greater than five per centum of that produced by such person during calendar year 1986.

SEC. 8. LIMITATION ON USE.

Effective January 1, 1994, it shall be unlawful to introduce into interstate commerce or to use a substance listed under subsection (a) of section 5 except for medical purposes approved by the Commissioner of the Food and Drug Administration, in consultation with the Administrator, and, for a period not to exceed 10 years after January 1, 1994, to maintain and service household appliances.

SEC. 9. LIMITATION ON OZONE DEPLETION POTENTIAL.

(a) Effective January 1, 1988, it shall be unlawful for any person to produce substances covered by this Act in annual quantities that, based upon the ozone depletion factor assigned to each such substance under subsection (c) of section 5, yield a total ozone depletion potential greater than that produced by such person during calendar year 1986.

(b) Effective January 1, 1989, it shall be unlawful for any person to produce substances covered by this Act in annual quantities that, based upon the ozone depletion factor assigned to each such substance under subsection (c) of section 5, yield a total ozone depletion potential greater than 75 per centum of that produced by such person during calendar year 1986.

(c) Effective January 1, 1991, it shall be unlawful for any person to produce substances covered by this Act in annual quantities that, based upon the ozone depletion factor assigned to each such substance under subsection (c) of section 5, yield a total ozone depletion potential greater than 50 per centum of that produced by such person during calendar year 1986.

(d) Effective January 1, 1995, it shall be unlawful for any person to produce substances covered by this Act in annual quantities that, based upon the ozone depletion factor assigned to each such substance under subsection (c) of section 5, yield a total ozone depletion potential greater than five per centum of that produced by such person during calendar year 1986.

(e) The Administrator shall promulgate regulations, after notice and opportunity for public comment, which require each producer to reduce its production of (1) a substance listed under subsection (a) of section 5 more rapidly than the schedule provided under this Act; or (2) a substance listed under subsection (b) of section 5 on a specific schedule not otherwise provided for in this Act.

if the Administrator determines that such revised or specific schedule (A) based on new information regarding the harmful effects on the stratosphere or climate which may be associated with a listed substance, is necessary to protect human health and the environment or (B) based on the availability of substitutes for a listed substance, is attainable. Any person may petition the Administrator to issue such regulations. The Administrator shall issue such regulations within 180 days after receipt of any such petition, unless the Administrator denies the petition.

SEC. 10. PRODUCTION PHASE-OUT EXCEPTIONS.

(a) RECOVERY AND DESTRUCTION.—Upon application by an interested person, and after notice and opportunity for public comment, the Administrator may permit such person to produce a substance listed under section 5 during a 12 month period in a specified quantity that exceeds the applicable quantity limitations under sections 7 and 9 if the applicant demonstrates to the Administrator by clear and convincing evidence that such specified quantity has been offset by an equal or greater quantity of such listed substance which has been recovered and destroyed from products in use.

(b) NATIONAL SECURITY.—The President may issue such orders regarding production and use of halon-1211 and halon-1301 at any specified site or facility as may be necessary to protect the national security interests of the United States if the President finds that adequate substitutes are not available and that the production and use of such substance is necessary to protect such national security interests. Such orders may include, where necessary to protect such interests, an exemption from any requirement contained in this Act. The President shall notify the Congress within 30 days of the issuance of an order under this paragraph providing for any such exemption. Such notification shall include a statement of the reasons for the granting of the exemption. An exemption under this paragraph shall be for a specified period which may not exceed one year. Additional exemptions may be granted, each upon the President's issuance of a new order under this paragraph. Each such additional exemption shall be for a specified period which may not exceed one year. No exemption shall be granted under this paragraph due to lack of appropriation unless the President shall have specifically requested such appropriation as a part of the budgetary process and the Congress shall have failed to make available such requested appropriation.

SEC. 11. CERTIFICATION OF EQUIVALENT PROGRAMS.

(a) IMPORTS.—Effective 12 months after the date on which a substance is placed on the priority list pursuant to subsection (a) of section 5, it shall be unlawful for any person to import such substance, any product containing such substance, or any product manufactured with a process that uses such substance unless the Administrator, in consultation with the Secretary of State (the Secretary), has published a decision, after notice and opportunity for public comment, certifying that the nations in which such substance or product was manufactured and from which such substance or product is imported have established and are fully implementing programs that require reduced production of such listed substance, and limit production of other substances covered by this Act, on a schedule and in a manner that is at least as stringent as the reduction schedule for, and limitations on, domestic production which apply under this Act. The prohibition on the import of any product manufactured with a process that uses a substance listed under subsection (a) of section 5 shall include, after notice and opportunity for public comment, any product which the Administrator has reason to believe may have been manu-

factured with a process that uses such substance. The Administrator's decision that a product may have been manufactured with a process that uses such substance shall constitute a rebuttable presumption.

(b) CERTIFICATION OF NATIONAL PROGRAM.—The Administrator shall not certify any national program under subsection (a) unless it is determined that—

(1) the nation has adopted legislation or regulations which give the reduction schedule for each listed substance the force of law; and

(2) the legislation or regulations include reporting requirements and enforcement provisions no less stringent than those specified in sections 6 and 13 of this Act, and that the information contained in such reports is available to the Administrator and the Secretary.

(c) REVOCATION.—At least annually, the Administrator, in consultation with the Secretary, shall review each certification made under this section and shall revoke such certification, after notice and opportunity for public comment, unless it is determined that the conditions of subsections (a) and (b) remain satisfied and that the reduction schedule for each listed substance is in fact being carried out in such nations. Any such revocation shall take effect 180 days after notice of the revocation has been published.

(d) ALLOCATION.—Any person who imports a substance covered by this Act or a product containing such substance shall, for the purposes of section 7 (production phase-out for priority list) and section 9 (limitation on ozone depletion potential), shall be deemed to have produced an equivalent amount of such substance on the date of such importation.

SEC. 12. LABELING.

(a) Effective 18 months after the date on which a substance is placed on a list maintained under subsection (a) or (b) of section 5, no container in which such substance is stored or transported, no product containing such substance, and no product manufactured with a process that uses a listed substance shall be introduced into interstate commerce unless it bears a label stating either of the following, as appropriate:

(1) "Contains (insert name of listed substance) a substance which may harm public health and environment by destroying ozone in the upper atmosphere and by disrupting the climate".

(2) "Manufactured with (insert name of listed substance), a substance which may harm public health and environment by destroying ozone in the upper atmosphere and by disrupting the climate".

The Administrator shall issue regulations to implement the labelling requirements of this section within one year after enactment of this section, after notice and opportunity for public comment. Such regulations shall require all containers and products which are subject to this section and introduced or reintroduced into commerce later than 90 days after promulgation of such regulations to bear the appropriate label.

SEC. 13. FEDERAL ENFORCEMENT.

(a) COMPLIANCE ORDERS.—(1) Whenever on the basis of any information the Administrator determines that any person has violated or is in violation of any requirement of this Act, the Administrator may issue an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified time period or both, or the Administrator may commence a civil action in the United States district court in the district in which the violation occurred for appropriate relief, including a temporary or permanent injunction.

(2) Any order issued pursuant to this subsection may include a suspension or revocation of any permit issued by the Administrator under this Act and shall state with reasonable specificity the nature of the violation. Any penalty assessed in the order shall not exceed $25,000 per day of noncompliance for each violation of a requirement of this Act. In assessing such a penalty, the Administrator shall take into account the seriousness of the violation and any good faith efforts to comply with applicable requirements.

(b) PUBLIC HEARING.—Any order issued under this section shall become final unless, no later than thirty days after the order is served, the person or persons named therein request a public hearing. Upon such request, the Administrator shall promptly conduct a public hearing. In connection with any proceeding under this section the Administrator may issue subpenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and may promulgate rules for discovery procedures.

(c) VIOLATION OF COMPLIANCE ORDERS.—If a violator fails to take corrective action within the time specified in a compliance order, the Administrator may assess a civil penalty of not more than $25,000 for each day of continued noncompliance with the order and the Administrator may suspend or revoke any permit issued to the violator.

(d) CRIMINAL PENALTIES.—Any person who—

(1) knowingly exceeds the production limits under section 7 (production phase-out for initial list) or section 9 (limitation on ozone depletion potential);

(2) knowingly introduces into interstate commerce a substance that was produced in violation of section 7 or section 9;

(3) knowingly imports a substance listed under subsection (a) of section 5, a product containing such substance, or a product manufactured with a process that uses such substance, in violation of section 11 (certification of equivalent programs);

(4) knowingly introduces into interstate commerce a substance or product in violation of section 8 (limitation on use) or section 12 (labelling);

(5) knowingly omits material information or makes any false material statement or representation in any application, record, report, permit, or other document filed, maintained, or used for purposes of compliance with this Act; or

(6) knowingly produces, transports, distributes, or uses any substance listed under section 5, a product containing such substance, or a product manufactured with a process that uses such substance, and who knowingly destroys, alters, conceals or fails to file any record, application, report, or other document required to be maintained or filed for purposes of compliance with this Act

shall, upon conviction, be subject to a fine in accordance with title 18 of the United States Code for each day of violation, or imprisonment not to exceed two years, or both. If conviction is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment under the respective paragraph shall be doubled with respect to both fine and imprisonment.

(e) CIVIL PENALTY.—Any person who violates any requirement of this Act shall be liable to the United States for a civil penalty in an amount not to exceed $25,000 for each such violation.

(f) VIOLATIONS.—Each day of violation of any requirement of this Act shall, for purposes of this section, constitute a separate violation. In addition, for purposes of section 7 (production phase-out for initial list), section 8 (limitation on use), section 9 (limitation on ozone depletion potential), and paragraphs (1), (2), (3), and (4) of subsection (d) of this section, the production, introduction into commerce, or importation of each 100 pounds of a substance listed under subsection (a) of section 5 that is in excess of the production limits under section 7 or section 9 shall constitute a separate violation.

SEC. 14. JUDICIAL REVIEW OF FINAL REGULATIONS AND CERTAIN PETITIONS.

Any judicial review of any final action of the Administrator pursuant to this Act shall be in accordance with sections 701 through 706 of title 5 of the United States Code, except that—

(1) a petition for review of any final action of the Administrator may be file by any interested person in the Circuit Court of Appeals of the United States for the Federal judicial district in which such person resides or transacts business, and such petition shall be filed within ninety days from the date of such promulgation or denial or after such date if such petition is for review based solely on grounds arising after such ninetieth day; action of the Administrator with respect to which review could have been obtained under this subsection shall not be subject to judicial review in civil or criminal proceedings for enforcement; and

(2) if a party seeking review under this Act applies to the court for leave to adduce additional evidence, and shows to the satisfaction of the court that the information is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the Administrator, and to be adduced upon the hearing in such manner and upon such terms and conditions as the court may deem proper; the Administrator may modify administrative findings as to the facts, or make new findings, by reason of the additional evidence so taken, and shall file with the court such modified or new findings and the Administrator's recommendation, if any, for the modification or setting aside of the original administrative order, with the return of such additional evidence.

SEC. 15. CITIZEN SUITS.

(a) IN GENERAL.—Except as provided in subsection (b) or (c) of this section, any person may commence a civil action on his own behalf—

(1) against any person (including (a) the United States, and (b) any other governmental instrumentality or agency, to the extent permitted by the eleventh amendment to the Constitution) who is alleged to be in violation of any permit, regulation, condition, requirement, prohibition, or order which has become effective pursuant to this Act; or

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this Act which is not discretionary with the Administrator.

Any action under paragraph (a)(1) of this subsection shall be brought in the district court for the district in which the alleged violation occurred. Any action brought under paragraph (a)(2) of this subsection may be brought in the district court for the district in which the alleged violation occurred or the District Court of the District of Columbia. The district court shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce the permit, regulation, con-

dition, requirement, prohibition, or order, referred to in paragraph (1), to order such person to take such other action as may be necessary, or both, or to order the Administrator to perform the act or duty referred to in paragraph (2), as the case may be, and to apply any appropriate civil penalties under section 13.

(b) ACTIONS PROHIBITED.—No action may be commenced under subsection (a)(1) of this section—

(A) prior to 60 days after the plaintiff has given notice of the violation to—

(i) the Administrator; and

(ii) to any alleged violator of such permit, regulation, condition, requirement, prohibition, or order; or

(B) if the Administrator has commenced and is diligently prosecuting a civil or criminal action in a court of the United States to require compliance with such permit, regulation, condition, requirement, prohibition, or order.

In any action under subsection (a)(1), any person may intervene as a matter of right. Any action respecting a violation under this Act may be brought under this section only in the judicial district in which such alleged violation occurs.

(c) NOTICE.—No action may be commenced under paragraph (a)(2) of this section prior to 60 days after the plaintiff has given notice to the Administrator that he will commence such action. Notice under this subsection shall be given in such manner as the Administrator shall prescribe by regulation.

(d) INTERVENTION.—In any action under this section the Administrator, if not a party, may intervene as a matter of right.

(e) COSTS.—The court, in issuing any final order in any action brought pursuant to this section or section 14, may award costs of litigation (including reasonable attorney and expert witness fees) to the prevailing or substantially prevailing party, whenever the court determines such an award is appropriate. The court may, if a temporary restraining order or preliminary injunction is sought, require the filing of a bond or equivalent security in accordance with the Federal Rules of Civil Procedure.

(f) OTHER RIGHTS PRESERVED.—Nothing in this section shall restrict any right which any person (or class of persons) may have under any statute or common law to seek enforcement of any standard or requirement or to seek any other relief (including relief against the Administrator).

SEC. 16. SEPARABILITY.

If any provision of this Act, or the application of any provision of this Act to any person or circumstance, is held invalid, the application of such provision to other persons or circumstances, and the remainder of this Act, shall not be affected thereby.

SEC. 17. RELATIONSHIP TO OTHER LAWS.

(a) Nothing in this Act shall be construed to alter or affect the authority of the Administrator under the Clean Air Act or the Toxic Substances Control Act or to affect the authority of any other department, agency, or instrumentality of the United States under any provision of law to promulgate or enforce any requirement respecting the control of any substance, practice, process, or activity for purposes of protecting the stratosphere or ozone in the stratosphere.

(b) Nothing in this Act shall preclude or deny any State or political subdivision thereof from adopting or enforcing any requirement respecting the control of any substances, practice, process, or activity for purposes of protecting the stratosphere or ozone in the stratosphere.

SEC. 18. AUTHORITY OF ADMINISTRATION.

The Administrator is authorized to prescribe such regulations as are necessary to carry out this Act.

SECTION-BY-SECTION ANALYSIS OF THE STRATOSPHERIC OZONE AND CLIMATE PROTECTION ACT OF 1987

Section 1. Short Title

Section 2. Congressional Findings. Includes findings that manufactured substances, such as chlorofluorocarbons, are polluting the atmosphere and may be contributing to the related environmental problems of stratospheric ozone depletion and global climate change due to the greenhouse effect; these related problems threaten human health and the environment on a global scale; it is necessary to control international trade in chlorofluorocarbons and other ozone depleting substances to protect our global environment; and the United States needs to be the world leader in developing substitutes for these harmful chemicals.

Section 3. Objectives and National Goal. Establishes as a national goal, the elimination of atmospheric pollution with manufactured chemicals, such as chlorofluorocarbons.

Section 4. Definitions. Includes definitions of "household appliances" and "medical purposes" that receive special consideration under Section 8 "manufactured substances"; and "substances covered by this Act".

Section 5. Listing of Regulated Substances. There are two lists of regulated substances: (1) a priority list of chemicals that must be virtually eliminated over the next 6 years (reduce production by 95%); and (2) a list of other chemicals with ozone depletion potential. The priority list includes the most popular and harmful chlorofluorocarbons (11, 12 and 113) and halons (1211 and 1301). The second list includes chemicals such as methylene chloride, carbon tetrachloride, and methyl chloroform.

The production of chemicals on the second list is regulated and limited on the basis of overall ozone depletion potential. Since the regulated chemicals have differing, relative ozone depletion potential, producers are free to shift their production capacity from one second list substance to another, provided the total ozone depletion potential of chemicals manufactured by a producer is reduced significantly over the next eight years (to 5% of 1986 levels).

Section 6. Reporting. Producers of ozone depleting chemicals are required to submit annual reports to the EPA.

Section 7. Production Phase-Out for Priority List. This section sets forth the 6 year, 95% phase-out mentioned earlier.

Section 8. Limitation on Use. Recognizing that (1) there are some essential medical uses for these chemicals for which no safe alternative is likely to be developed, and (2) many people have recently purchased (or are planning to purchase) household appliances that depend on the continued availability of these chemicals, the phase-out in Section 7 is limited to 95% and, beginning in 1994, the chemicals that are produced can be used only for medical purposes and to service and maintain household appliances.

Section 9. Limitation on Ozone Depletion Potential. This section sets forth the 8 year reduction in overall production of ozone depleting substances mentioned earlier.

Section 10. Production Phase-Out Exceptions. To encourage the recapture and safe destruction of harmful chemicals, a production credit that can be used to increase the production limits of Sections 7 and 9 is available upon proof of such destruction.

Section 11. Certification of Equivalent Programs. Chemicals with ozone depleting potential pose a threat to human health and the environment without regard to where such chemicals or products that use such chemicals are made. Protection of the environment necessitates the regulation of international trade and the imposition of import controls that track the domestic controls set forth in this Act. Therefore, unless a country of origin is certified as having a phase-out program similar to this Act, the regulated chemicals (or products) from such country cannot be imported into this country. Similarly, this Act will prohibit the use of the U.S. as a free port for transshipment of such chemicals (or products).

Section 12. Labelling. All containers of, or products made with, substances covered by this Act must bear a warning label.

Section 13-17. Miscellaneous Provisions on Federal Enforcement, Judicial Review, Citizen Suits, Separability, Relationship to Other Laws, and Authority of Administrator.

By Mr. DECONCINI:

S. 572. A bill to amend the Sherman Act and the Clayton Act to modify the application of such acts to international commerce; to the Committee on the Judiciary.

FOREIGN TRADE ANTITRUST IMPROVEMENTS ACT

● Mr. DECONCINI. Mr. President, I am introducing today the Foreign Trade Antitrust Improvements Act of 1987 which calls for the codification of the jurisdictional principle of "reasonableness" for private antitrust suits. This bill is a compromise between my previous bill, S. 397, which was introduced in the 99th Congress, and a similar proposal made by the administration, S. 2162. After extensive hearings, this compromise was reported favorably by the Judiciary Committee during its final meeting of the last session of Congress.

This action by the Judiciary Committee reflects both the seriousness of the problems caused by extraterritorial application of the U.S. antitrust laws, and the widespread recognition that remedial legislation is necessary to safeguard our foreign relations interests and increase the competitiveness of U.S. business abroad. The controversy concerning U.S. extraterritorial antitrust enforcement has had a distressing effect on the climate for international trade and investment by U.S. firms. U.S. companies are often caught between the inconsistent demands of governments or they suffer from retaliation and discrimination arising from resentment at the extraterritorial application of our antitrust laws. U.S. firms have been regarded as less desirable partners in foreign ventures or markets because of their antitrust baggage.

As we all know, we have become a debtor nation and the trade imbalance problem shows no signs of abating. We can ill afford to further hamper our international competitiveness through unreasonable application of our antitrust laws. The provisions of my bill will contribute to the development of more harmonious legal rules for inter-

Talking Points

On Ozone Depletion

Meeting of Energy and Environment Working Group
February 20, 1987

- Ralph, a key goal of this discussion is to inform everybody about where things stand on this issue. A second key goal is to discuss how the international negotiations on ozone depletion will affect our writing of domestic regulations.

- You might start out by noting that next week a U.S. team is traveling to Vienna for a second round of negotiations on an international protocol to reduce ozone-depleting chemicals.

- Then, you could call upon Ted Harris to bring the group up to date on the state of negotiations and on the U.S. position.

- You may also want to call on Richard Benedick, the leader of the U.S. delegation, to elaborate.

- You might then turn to the issue of drafting domestic regulations. EPA is under a court order to issue regulations controlling ozone-depleting chemicals by the end of the year.

- You might ask Milton Russell of EPA to fill the group in on where EPA now stands in developing those regulations?

- The Justice Department is also working on some proposals to use market incentives to reduce ozone-depleting chemicals domestically. This initiative was listed in the President's State of the Union message to Congress.

- You might ask Tom Hookano from Hank Habicht's staff at Justice where these proposals stand.

- A key question to ask is to what extent the U.S. international negotiating position will limit the Administration's flexibility in writing regulations domestically?

- Two related, and probably controversial, questions are: By pushing for a phase down in the production of ozone-depleting chemicals internationally, are we almost guaranteeing that we will have to write similarly stringent regulations domestically, even if no international protocol is ever signed?

- And, has the Administration ever decided that the scientific evidence linking CFCs (or chlorofluorocarbons) to ozone

depletion justifies a phase down in CFC production, as opposed merely to a freeze?

- Depending on how the discussion goes, you may be able to determine whether the issue requires that options be presented to the DPC.

1. Sixth Revised Draft Protocol Text
2. Trade Article
3. Controls Article
4. U.S. Proposed text
5. U.S. Proposed trade article

United Nations Environment Programme

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Ad Hoc Working Group of Legal and Technical Experts for the Preparation of a Protocol on Chlorofluorocarbons to the Vienna Convention for the Protection of the Ozone Layer (Vienna Group)

Second Session
Vienna, 23-27 February 1987

DRAFT REPORT OF THE AD HOC WORKING GROUP ON THE WORK OF ITS SECOND SESSION

(continued)

SIXTH REVISED DRAFT PROTOCOL ON CHLOROFLUOROCARBONS

PREAMBLE

THE PARTIES TO THIS PROTOCOL,

Being parties to the Vienna Convention for the Protection of the Ozone Layer,

Mindful of their obligation under the Vienna Convention to take appropriate measures to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer,

Recognizing the possibility that world-wide emissions of fully halogenated chlorofluorocarbons and other chlorine containing substances can significantly deplete and otherwise modify the ozone layer, resulting or likely to result in adverse effects on human health and the environment,

Recongizing also the potential climatic effects of chlorofluorocarbons emissions,

Determined to protect the ozone layer by taking precautionary measures to control total global emissions of chlorofluorocarbons,

Mindful of the precautionary measures for controlling emissions of chlorofluorocarbons that have already been taken at the national and regional levels,

Aware that measures taken to protect the ozone layer from modifications due to the use of chlorofluorocarbons should be based on relevant scientific and technical considerations,

Mindful that special provision needs to be made in regard to the production and use of chlorofluorocarbons for the benefit of developing countries,

Considering the importance of promoting international co-operation in the research and development of science and technology on the control and reduction of chlorofluorocarbons emissions, bearing in mind, in particular, the needs of developing countries,

HAVE AGREED AS FOLLOWS:

ARTICLE I: DEFINITIONS

For the purpose of this Protocol,

1. "The Convention" means the Vienna Convention for the Protection of the Ozone Layer;
2. "Parties" means, unless the text otherwise indicates, Parties to this Protocol;
3. "The Secretariat" means the Secretariat of the Convention;
(4. "Chlorofluorocarbon" or "CFC" means any fully halogenated chlorofluoroalkane.)

ARTICLE II: CONTROL MEASURES

ARTICLE III: REVIEW OF CONTROL MEASURES

The Parties shall regularly at their meetings reassess the control measures provided for in article II, on the basis of the scientific, environmental and economic information available, and shall take all appropriate action.

ARTICLE IV: REPORTING OF INFORMATION

1. Within one year after the entry into force of this Protocol each Party shall inform the Secretariat about the implementation of this Protocol.

2. The Parties to this Protocol, either individually or jointly, shall submit annually to the Secretariat;

(a) Information on national laws, regulations, policy directives and other measures adopted to implement this Protocol;

(b) Any other information to indicate their implementation of this Protocol.

ARTICLE V: RESEARCH, DEVELOPMENT AND EXCHANGE OF INFORMATION

1. The Parties shall co-operate in promoting, directly and through competent international bodies, bearing in mind the needs of developing countries, research, development and exchange of information on:

(a) The best practicable technologies;

(b) Possible alternatives to CFCs and CFC products;

(c) Costs and benefits of relevant control strategies.

2. Each Party shall submit to the Secretariat a summary of activities conducted pursuant to the present article on a biennial basis.

ARTICLE VI: TECHNICAL ASSISTANCE

1. The Parties shall co-operate, taking into account in particular the needs of developing countries, in promoting, in the context of the provisions of article 4 of the Vienna Convention, technical assistance to facilitate participation in and implementation of this Protocol.

2. Any Party of Signatory to this Protocol in need of technical assistance in implementing it may submit a request to the Secretariat.

ARTICLE VII: MEETINGS OF THE PARTIES

1. The Parties shall hold meetings at regular intervals. TheSecretariat shall convene the first meeting of the Parties not later than one year after the entry into force of this Protocol and in conjunction with a meeting of the Conference of the Parties to the Convention, if a meeting of the latter is scheduled within that period.

2. Subsequent ordinary meetings of the Parties shall be held, unless the Parties otherwise decide, in conjunction with meetings of the Conference of the Parties to the Convention. Extraordinary meetings of the Parties shall be held at such other times as may be deemed necessary at a meeting of the Parties, or at the written request of ay of them, provided that, within six months of such a request being communicated to them by the Secretariat, it is supported by at least one third of the Parties.

3. The Parties shall by consensus adopt Rules of Procedure for their meetings.

4. The functions of the meetings of the Parties shall be:
   (a) To review implementation of this Protocol;
   [(b) To establish where necessary guidelines or procedures for reporting of information as provided for in article IV and V;]
   (c) To review requests for technical assistance provided for in article VI;
   (d) To review requests received from the Secretariat pursuant to article VIII;
   (e) To reassess, pursuant to article III, the control measures provided for in article II;
   (f) To consider and adopt proposals for amendment of this Protocol (in conformity with articles IX and X of the Convention;)
   (g) To consider and adopt the budget for implementation of this Protocol;
   (h) To consider and undertake any additional action that may be required for the achievement of the purposes of this Protocol.

5. The United Nations, its specialized agencies and the International Atomic Energy Agency, as well as any State not party to this Protocol, may be represented at meetings of the Parties by observers. Anybody or agency, whether national or international, governmental or non-governmental, qualified in fields relating to the protection of the ozone layer which has informed the secretariat of its wish to be represented at a meeting of the Parties as an observer may be admitted unless at least one-third of the Parties present object. The admission and paticipation of observers shall be subject to the rules of procedure adopted by the Parties.

ARTICLE VIII: SECRETARIAT

The Secretariat shall:

(a) Arrange for and service meetings of the Parties provided for in article VII;

(b) Distribute to the Parties information on each Party's year of maximum use of CFCs by sesctors and the total amount of its use in that year, as reported by the Parties in accordance with article IV;

(c) Prepare and distribute to the Parties regularly a report based on information received pursuant to articles IV and V;

(d) Notify the Parties of any request for technical assistance received pursuant to article VI so as to facilitate the provision of such assistance to the extent possible;

(e) Perform such other functions for the achievment of the purposes of the Protocol as may be assigned to it by the Parties.

ARTICLE IX: FINANCIAL PROVISIONS

1. The funds required for the operation of this Protocol, including those for the functioning of the Secretariat related to this Protocol shall be charged exclusively against contributions from the Parties.

2. The Parties shall be consensus adopt Financial Rules for the Operation of this Protocol, including rules for assessing contributions from the Parties.

ARTICLE X: RELATIONSHIP OF THIS PROTOCOL TO THE CONVENTION

The provisions of the Convention relating to its protocols shall apply to this protocol.

ARTICLE XI: SIGNATURE

This Protocol shall be open for signature at ..... from ..... to .....

ARTICLE XII: ENTRY INTO FORCE

1. The Protocol shall enter into force on the same date as the Convention enters into force, provided that at least nine instruments of ratification, acceptance, approval or accession to the Protocol have been deposited. In the event that nine such instruments have not been deposited by the date of entry into force of the Convention, this Protocol shall enter into force on the thirtieth day following the date of the ninth instrument of ratification, acceptance, approval or accession to the Protocol.

2. For the purpose of paragraph 1 any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by member States of such organizations.

3. After the entry into force of this Protocol, any state or regional economic integration organization shall become a Party to this Protocol on the thirtieth day following the date of deposit of its instrument of ratification, acceptance, approval or accession.

ARTICLE XII bis: RESERVATIONS

(No reservations may be made to this Protocol)

ARTICLE XIII: AUTHENTIC TEXTS

The original of this Protocol, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

IN WITNESS WHEREOF THE UNDERSIGNED, BEING DULY AUTHORIZED TO THAT EFFECT HAVE SIGNED THIS PROTOCOL,

DONE AT .....

THIS .....
DAY OF

26 February 1987

Ad Hoc Working Group of Legal and Technical Experts for the Preparation of a Protocol on Chlorofluorocarbons to the Vienna Convention for the Protection of the Ozone Layer (Vienna Group)

Second Session
Vienna, 23-27 February 1987

ARTICLE II - Control Measures

1. Each party, under jurisdiction of which substances referred to in Annex A are produced, shall ensure that within [one to three] years after the entry into force of this protocol the [annual production and imports] [adjusted annual production] of these substances does [do] not exceed their [its] 1986 level.

2. Each party, under the jurisdiction of which substances referred to in Annex A are not produced at the time of the entry into force of this Protocol, shall ensure that within [one to three] years hereinafter [its annual production and imports] [its adjusted annual production] do [does] not exceed the level of imports in 1986.

3. Each party shall ensure, that within [blank] years after the entry into force of this protocol, levels attained in accordance with paragraphs 1 and 2 will be reduced by [10 to 50] percent, [unless the parties by a two-thirds majority otherwise decide] [if the parties confirm this obligation by a two-thirds majority].

Option A

4. Parties shall decide not later than [blank] years after the entry into force of this protocol by a two-thirds majority on
- new substances to be included in Annex A
- further reduction of 1986 levels.
These decisions shall be reviewed in intervals of [blank] years.

Option B

4. Each party shall ensure that, within [blank] years after the entry into force of this protocol, levels attained in accordance with paragraph 3 will be reduced by [blank] [unless parties by a two-thirds majority otherwise decide] [if parties confirm this obligation by a two-thirds majority].

RESULTS OF TRADE SUB-GROUP:

Article on Control of Trade

1. Within ( ) years after entry into force of this Protocol, each Party shall ban the import of the controlled substances in bulk from any state not party to this protocol (, unless such state is in full compliance with Article ( )and this Article and has submitted information to that effect as specified in Article ( )).

2. Within ( ) years after entry into force of this Protocol, each Party shall (restrict) (ban) imports of products containing substances controlled by this Protocol from any state not party to this Protocol (unless such state is in full compliance with Article () and this Article, and has submitted information to that effect as specified in Article ( )). At least one year prior to the time such measures take effect, the Parties shall elaborate in an annex a list of the products to be (restricted) (banned) and standards for applying such measures uniformly by all Parties.

3. The Parties shall jointly study the feasibility of restricting or banning imports of products produced with substances controlled by this Protocol from any state not party to this Protocol (, unless such state is in full compliance with Article () and this Article and has submitted information to that effect as specified in Article ( )).

4. Within ( ) years after entry into force of this Protocol, each Party shall (ban) (restrict) (discourage) the export of technologies (to non-parties) for the production and use of the controlled substances (, unless such state is in full compliance with Article ( ) and this Article and has submitted information to that effect as specified in Article ( )).

5. The Parties shall not provide (to non-parties) bilateral or multilateral subsidies, aid, credits, guarantees, or insurance programs for the export of products, equipment, plants, or technology for the production or use of the controlled substances (, unless such state is in full compliance with Article( ) and this Article and has submitted information to that effect as specified in Article ( )).

6. The provisions of paragraphs 4 and 5 shall not apply to products, equipment, plants or technologies which contribute to the

United States Proposed Protocol Text

UNEP Negotiations on an Ozone Layer Protocol

December 1-5, 1986
Geneva, Switzerland

The United States believes that the potential risks to the stratospheric ozone layer from certain man-made chemicals require early and concerted action by the international community. Since the adoption in Vienna in March 1985 of the Ozone Layer Convention, an intensive scientific research and technical analysis effort has been carried out and is continuing, as reflected in the recent series of UNEP-Sponsored workshops. The results continue to indicate the emergence of a serious environmental problem of global proportions.

The United States further believes that governments should pursue three broad objectives during the course of the negotiations, to be embodied and elaborated in the final protocol. These are:

A. Agreement on a meaningful near-term first step to reduce significantly the risk of stratospheric ozone depletion and associated environmental and human health impacts.

B. Agreement on a long-term strategy and goals for coping with the problem successfully.

C. Agreement on a carefully-scheduled plan for achieving the long-term goals, including periodic reassessment and appropriate modification of the strategy and goals in response to new scientific and economic information.

In response to UNEP's invitation, the U.S. has prepared for discussion purposes a draft text based on the U.S views statement which we recently circulated. This text is for the operative articles only, and is designed for incorporation into the protocol text developed during the previous round of negotiations (i.e., it would replace Articles II through V of the fourth revised draft text).

The United States believes that what is required is a straightforward, cost-effective approach that will provide technology incentives and clear targets to governments and industry for developing and introducing new technologies for chemical conservation, recycling and substitution. The U.S. believes that its proposed text provides such an approach.

U.S. DRAFT PROTOCOL TEXT: OPERATIVE ARTICLES

Article II: Control Measures

1. Within [ ] year after entry into force of this Protocol, each Party shall ensure that its aggregate annual emissions of fully-halogenated alkanes does not exceed its 1986 level.

2. Within [ ] years after entry into force of this Protocol, each Party shall ensure that its aggregate annual emissions of fully-halogenated alkanes is reduced by [20] percent from its 1986 level.

3. Within [ ] years after entry into force of this Protocol, each Party shall ensure that its aggregate annual emissions of fully-halogenated alkanes is reduced by [50] percent from its 1986 level.

4. Within [ ] years after entry into force of this Protocol, each Party shall ensure that its aggregate annual emissions of fully-halogenated alkanes is reduced by [95] percent from its 1986 level.

5. The right of any Party to adopt control measures more stringent than contained herein is not restricted by this Article.

Article III: Calculation of Aggregate Annual Emissions

1. For the purposes of Article II, each Party shall calculate its aggregate annual emissions by taking its:

   a. aggregate annual production;

   [b. plus aggregate annual bulk imports;]

   [c. minus aggregate annual bulk exports to other Parties;]

   [d. minus aggregate annual amount of fully-halogenated alkanes which have been destroyed or permanently encapsulated.]

2. To calculate the aggregate amounts specified in the sub-paragraphs of paragraph 1, each Party shall multiply the amount of each fully-halogenated alkane by its ozone depletion weight, as specified in Annex A, and then add the products.

Article IV: Assessment and Adjustment of Control Measures

1. The Parties shall cooperate in establishing an international monitoring network for detecting, or aiding in the prediction of, modification of the ozone layer.

2. At least one year before implementing the reductions specified in paragraphs 2, 3, and 4, respectively, of Article II, the Parties shall convene an ad hoc panel of scientific experts, with composition and terms of reference determined by the Parties, to review advances in scientific understanding of modification of the ozone layer and the potential health, environmental, and climatic effects of such modification.

3. In light of such scientific review, the Parties shall jointly assess and may adjust the stringency, timing, and scope of the control measures in Article II and the ozone depletion weights in Annex A.

4. Any such adjustment shall be made by amending Article II and/or Annex A as provided in Article 9 of the Convention, except that such amendment would not be subject to the six month advance notice requirement of paragraph 2 of that Article.

Article V: Control of Trade

1. Within [ ] years after entry into force of this Protocol, each Party shall ban the import of fully-halogenated alkanes in bulk from any state not party to this Protocol [, unless such state is in full compliance with Article II and this Article and has submitted information to that effect as specified in paragraph 1 of Article VI].

2. Within [ ] years after entry into force of this Protocol, each Party shall ban:
   a. the export of technologies to the territory of non-parties
   [b. direct investment in facilities in the territory of non-parties]
   for producing fully-halogenated alkanes [, unless such state is in full compliance with Article II and this Article and has submitted information to that effect as specified in paragraph 1 of Article VI].

3. The Parties shall jointly study the feasibility of restricting imports of products containing or produced with fully-halogenated alkanes from any state not party to this Protocol.

Article VI: Reporting of Information

1. Each Party shall submit annually to the Secretariat data showing its calculation of aggregate annual emissions of fully-halogenated alkanes, as specified in Article III, using the format developed by the Secretariat pursuant to paragraph 3a.

2. Each Party shall submit to the Secretariat appropriate information to indicate its compliance with Article V.

3. The Secretariat shall:

   a. develop and distribute to all Parties a standard format for reporting such data as indicated by paragraph 1;

   b. take appropriate measures to ensure the confidentiality of all data submitted to it pursuant to paragraph 1, except for the aggregate annual emissions figures;

   c. compile and distribute annually to all Parties a report of the aggregate annual emissions figures and other information submitted to it pursuant to paragraph 2.

ORIGINAL: ENGLISH

Ad Hoc Working Group of Legal and Technical Experts
for the Preparation of a Protocol on
Chlorofluorocarbons to the Vienna Convention
for the Protection of the Ozone Layer (Vienna Group)

Second Session
Vienna, 23-27 February 1987

United States Proposed Trade Article

Article V: Control of Trade

1. Within [ ] years after entry into force of this Protocol, each Party shall ban the import of the controlled substances in bulk from any state not party to this Protocol [, unless such state is in full compliance with Article II and this Article and has submitted information to that effect as specified in paragraph 1 of Article VI].

2. Within [ ] years after entry into force of this Protocol, each Party shall restrict imports of products containing substances controlled by this Protocol from any state not party to this Protocol [unless such state is in full compliance with Article II and this Article, and has submitted information to that effect as specified in paragraph 1 of Article VI]. At least one year prior to the time such restrictions take effect, the Parties shall elaborate in an annex a list of the products to be restricted and standards for applying such restrictions uniformly by all Parties.

3. The Parties shall jointly study the feasibility of restricting imports of products produced with substances controlled by this Protocol from any state not party to this Protocol.

4. Within [ ] years after entry into force of this Protocol, each Party shall ban the export of technologies to the territory of non-parties for the production and use of the controlled substances [, unless such state is in full compliance with Article II and this Article and has submitted information to that effect as specified in paragraph 1 of Article VI].

5. Parties shall not provide bilateral or multilateral subsidies, aid, credits, guarantees, or insurance programs for the export of products, equipment, plants, or technology for the production or use of the controlled substances.