FRIENDS OF THE EARTH
Environmental Policy Institute
OCEANIC SOCIETY

Index

Report on the Third Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer
Nairobi, Kenya June 19-21, 1991

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I. Introduction

On June 19-21, Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer met at the United Nations Environment Program (UNEP) headquarters in Nairobi for their third annual meeting. The conference was preceded by a two-day meeting of the Parties to the Vienna Convention on Protection of the Ozone Layer, the framework agreement which gave birth to the Montreal Protocol, and a week of preparatory meetings.

With generous support from the German Marshall Fund of the United States, I was able to attend the meetings as an observer, representing both Friends of the Earth-USA and Friends of the Earth International. Representatives of Friends of the Earth-Canada, Greenpeace International, Greenpeace-UK, and the Kenyan Consumers Organization also attended as observers. The following report highlights the outcome of the Montreal Protocol meeting and suggests ways in which the environmental community can follow-up in order to bring greater protection to the ozone layer.

II. Summary of NGO Objectives and Meeting Outcome

A. Governments Fail to Declare They Will Strengthen the Protocol

Because the Nairobi meeting took place in the wake of new scientific findings showing worsening ozone depletion, Friends of the Earth (FoE) went to Nairobi believing that a political opportunity exists to convince governments to further strengthen the Montreal Protocol. In April, NASA had released satellite data which show that the ozone layer over northern-mid latitudes is thinning twice as fast as scientists had previously thought. The findings have sounded an alarm, because they indicate that significant ozone depletion is occurring over heavily populated regions of the world and extending into springtime, when people begin to spend time outdoors. (See Appendix #1, Atmosphere article "Ozone Layer Thinning Faster.")

While Parties were procedurally unable to amend the protocol in Nairobi, because no Party had put forward an amendment proposal six months in advance of the meeting as required, we had hoped governments would issue a strong declaration indicating they would amend the protocol in 1992. One of our primary objectives in Nairobi was to influence, as much as possible, the language of such a declaration.

Unfortunately, Parties to the Montreal Protocol did not issue a declaration committing themselves to a specific set of amendments at their next meeting in 1992. Several governments opposed such a declaration, revealing that broad international support to strengthen the protocol does not yet exist.

B. NGOs Gain Observer Status at Ozone Fund Meetings

Our other priority was to secure a role for NGOs in the implementation of the Ozone Fund. At the June 1990 meeting of the Parties in London, governments established a financial mechanism to cover the incremental costs of implementing the protocol in developing countries and to provide these nations with ozone-protecting technologies. The Executive Committee which oversees the Ozone Fund, however, had barred NGO observers from its first three meetings and was proposing to permanently exclude NGOs unless they invite them with a special invitation.

At the Nairobi meeting, Parties were expected to adopt rules and procedures for meetings of the fund's Executive Committee. We aimed to convince them to permit NGO observers at fund meetings in the same manner they had opened the Montreal Protocol negotiations to observers all along.

On a positive note, the Parties did decide that NGOs should be permitted to observe Ozone Fund meetings. The decision sets an important precedent, because NGOs have been campaigning to increase their involvement in the operations of multilateral lending institutions, such as the World Bank. Through greater access, NGOs hope to influence the shape of lending projects, many of which have a negative impact on the environment.

III. What Happened at the Meeting?

A. No Nairobi Declaration

It is a great disappointment that the Parties to the Montreal Protocol did not respond to the new scientific findings by issuing a declaration committing themselves to further strengthening the protocol when it is next up for amendment in 1992. When the Parties first met in Helsinki in May 1989, they issued the Helsinki Declaration which gave negotiating guidance to the Parties in the period leading up to the London amendment. Such a declaration also served to reassure the world community that governments would take further action beyond the original Montreal Protocol. Montreal Protocol Parties did not give the world similar assurances at the Nairobi meeting.

1. Parties Call for More Study

Instead, the Parties simply instructed the protocol's assessment panels to look at "the possibilities and difficulties of an earlier phaseout of the controlled substances, for example the implications of a 1997 phaseout." They also asked the panels to identify the areas where HCFCs are the only suitable alternative, estimate the quantity of HCFCs that will be needed, and suggest a possible date for an HCFC phaseout. (See Appendix #2, Nairobi Meeting Report Decision III/12 "Assessment Panel".)

The wording of this mandate to the assessment panels was the most rigorously negotiated text produced by Parties at the meeting. NGOs lobbied several delegations to try to toughen the language. Despite the support of some governments, we did not have much success. Consensus did not even exist to include phrases such as "1997 or sooner" or "at the earliest possible date."

2. Several Delegations Oppose a Nairobi Declaration

Vocal opposition to a declaration by Japan, the Soviet Union, and several developing countries indicates that further amendment of the protocol in 1992 is far from certain. Most of these delegations argued that a declaration would prejudge the work of the protocol's assessment panels.

The Soviet Union doubts the validity of the new NASA ozone data. During plenary, the Soviets attempted to delete the section of the meeting report which summarizes Dr. Robert Watson's presentation on NASA's satellite ozone measurements.

Mexico, Malaysia, China, and Brazil agreed that the Parties should not move too quickly in adopting amendments. They feel it is already a big task to meet their 2010 phaseout deadline. The USSR and India said that their economic situation would make them unable to adapt to more stringent timetables. Some of these delegations were against giving the assessment panels specific phaseout dates to consider. Mexico even tried to make it difficult for Parties to offer adjustments and amendments to the protocol at the 1992 meeting.

In general, developing countries said the financial mechanism needs to prove that it can be effective in assisting developing countries.

Despite the great concern that U.S. Environmental Protection Agency (EPA) Administrator Reilly has expressed about the new NASA data, the United States did not forcibly press for a Nairobi declaration. The U.S., however, is unlikely to be a major obstacle to accelerating the phaseout of CFCs to 1997. During a July 30 hearing before the U.S. Senate on the outcome of the Nairobi meeting, Eileen Claussen of the EPA was asked if the U.S. agrees to a 1997 CFC phaseout. Claussen said, "The United States is waiting for the results of the assessment, which I am convinced will show that it can be done faster than the year 2000..." When asked why the U.S. has not joined other countries which have agreed to 1997, Claussen answered, "I expect the United States probably will, once we finish our assessment."

3. Seven Governments Issue Action Statement

Only seven governments - Sweden, Finland, Switzerland,

Norway, Austria, Germany, and Denmark - formally responded to the new scientific data. In a statement, they called for more stringent protocol measures to be adopted in 1992, and agreed to phase out CFCs, halons, and carbon tetrachloride as soon as possible but no later than the year 1997, and methyl chloroform as soon as possible but not later than the year 2000. They also said they are determined to limit by no later than 1995 the use of HCFCs to specific key applications where more environmentally suitable alternatives are available, and to phase out their use in those areas as soon as technically feasible. (See Appendix #3, Nairobi Meeting Report Other Matters.)

The statement, however, did not represent any new commitments on the part of the seven governments. The fact that New Zealand, Australia, Belgium, Canada, Liechtenstein, and the Netherlands chose not to sign the statement demonstrates political backsliding. These governments had joined the other seven in signing a similar declaration the year before in London, and many of them have made unilateral commitments to phase out CFCs and other chemicals faster than the revised Montreal Protocol requires.

Our lobbying efforts to increase the number of signatories to this statement revealed that European Community countries are increasingly reluctant to sign policy statements as individual states. Additionally, the virtual absence of environmental ministers at the meeting made it difficult for some delegations to make any new commitments.

4. NGOs Call for Urgent Action - Outline Crucial Next Steps

Friends of the Earth representatives issued a statement, signed by thirteen environmental organizations from around the world, calling on the Parties to accelerate and broaden the protocol's phaseout schedules. We urged governments to match or exceed the phaseout timetables set by Germany, and to place stringent controls on the chemical industry's new substitute chemicals known as HCFCs and HFCs. Highlighting NASA's new ozone findings, the statement stressed the need to quickly phase out HCFCs and HFCs with long lifetimes. (See Appendix #4, Critical Next Steps to Protect the Ozone Layer.)

a. Germany's Ozone Law - Not As Tough As We Thought

In drafting the NGO statement, we set Germany's ozone law as a minimum for the Parties to meet. Information we gathered from Germany and various media reports indicated that the law would eliminate production of methyl chloroform and carbon tetrachloride by January 1992, halons by January 1994, CFCs by January 1995, and HCFC-22 by January 2000. But detailed conversations in Nairobi with the head of the German Delegation, Heinrich Kraus, revealed a few loopholes which make the law

somewhat weaker than we were led to believe.

For example, while German CFC production will stop by 1995, CFCs can be imported after this time if they are used to service refrigeration equipment manufactured before January 1993. A similar exemption applies for HCFC-22. Some HCFC-22 production will stop in 2000, but refrigeration equipment produced before 2000 can be serviced indefinitely with manufactured or imported HCFC-22. Although the German law is still stronger than most national ozone programs, NGOs should be careful about how we characterize what it does.

b. Friends of the Earth & KCO Hold Press Conference

FOE and KCO held a press conference at the conclusion of the meeting. It was primarily aimed at Kenyan press, but some international press attended. Our main message was that the meeting lacked urgency. The event generated local press and a radio story in Canada. (See Appendices #5 and #6, FoE Press Release and "The Standard article "Chemicals That Pose Danger".)

5. Chemical Industry Splits Over How To Control HCFCs

As Parties begin to think about how to place controls on HCFCs, the chemical producers appear to be split in their position. European producers, led by ICI, are proposing a cap on HCFC production and a time certain phaseout. They suggest an HCFC production cap equal to 5 percent of the total chlorine contributed by all the CFCs and HCFCs produced in 1986. They did not specify a phaseout date in Nairobi. ICI representatives told us that this proposal was developed before NASA released its new ozone data, and that the size of their proposed cap is open for change as a result. They also indicated that one U.S. company agrees with this position.

Du Pont, on the other hand, is working against the cap idea. They say it would present serious problems for the U.S. industry, because the U.S. has more than twice the demand for refrigerant than Europe and much of it is for HCFC-22. They also argue that the CFC aerosol market would be included in Europe's 1986 base, giving Europe twice as much base volume for HCFC applications.

Du Pont believes that long-lived and short-lived HCFCs should be treated differently, and there should be firm HCFC phaseout dates. The company supports the approach taken by the U.S. Clean Air Act, which sets different HCFC production phaseout dates for HCFCs used in new equipment and HCFCs used to service existing equipment. It is not clear which phaseout dates Du Pont supports.

a. Du Pont Revises Projected Market for HCFCs and HFCs

In the past, Du Pont projected that HCFCs would capture 30 percent of the CFC market and HFCs ten percent. The remaining CFC demand would be met by not-in-kind substitution (non-fluorocarbon alternatives) and conservation. Now, Du Pont projects that HCFCs will have a smaller market of 24 percent, and HFCs will have a larger share of 17 percent. The company claims that HCFCs and HFCs are the only viable options to replace 40 percent of the CFC market.

B. Parties Grant NGOs Observer Status at Ozone Fund Meetings

When NGOs realized that a Nairobi declaration was unlikely, we concentrated our lobbying efforts on ensuring that the Parties would allow NGOs to observe meetings of the Executive Committee which oversee the implementation of the Ozone Fund. As part of the Nairobi meeting agenda, Parties planned to approve the rules and procedures for meetings of the Executive Committee. The committee's proposed rules excluded NGO observers unless they have a special invitation.

In advance of the meeting, we secured the help of the United States delegation, which has been a strong supporter of NGO involvement. The U.S. prepared an amendment to the rules of procedure which would open the meetings to NGOs, but maintained the option to close portions of the meeting if necessary. Since Canada and the Netherlands were the only other members of the fourteen-government Executive Committee that supported NGO participation, we were ready for a hard lobbying task.

We met with several delegations on this issue. Many, including Canada and Denmark, agreed to speak during plenary on our behalf. The common concerns delegates expressed were over the numbers of observers that would attend, potential lack of participation from developing country NGOs, and the need to respect sensitive matters such as confidential business information. Some developing country delegates also worried that NGOs from developed countries would pursue environmental objectives without understanding the challenge of their development needs. In the end, the U.S. proposal seemed to address these concerns. There was no major opposition to the amendment. The Parties approved the following wording:

> "The secretariat shall notify any body or agency, whether national or international, governmental or non-governmental, qualified in the field related to the work of the Executive Committee, that has informed the secretariat of its wishes to be represented, of any meeting so that it may be represented by an observer, subject to the condition that their admission to the meeting is not objected to by at least one-third of the Parties present at the meetings.

However, the Executive Committee may determine that any portion of its meetings may be closed to observers. Non-governmental observers should include observers from developing and developed countries and their total numbers should be limited as far as possible."

The observer rule is qualified in many respects, but it is our hope that in practice NGOs will be able to attend the meetings unrestricted. The Parties' ability to exclude any observer by a one-third vote parallels the observer rule which governs the meetings of the Parties. To date, the Parties have not exercised this right. It is important, however, that NGOs make an effort to limit their numbers and represent themselves with observers from both developed and developing countries.

1. Meeting With KCO, UNEP, and Sweden

FoE met with representatives of the Kenyan Consumers Organization (KCO), UNEP, and the Swedish delegation to move forward a KCO project proposal to organize an East Africa seminar on ozone depletion. The aim of the meeting would be to pull together NGOs, industry, and government to examine ways to reduce the use of ozone-depleting chemicals in the region. The meeting would focus on the refrigeration sector due to the large use of CFC refrigerants and the availability of CFC recycling technology.

Some Swedish funding for the project exists, and there is a possibility that UNEP might make funds available from the Ozone Fund as part of its information clearinghouse function. Meg Seki of UNEP in Nairobi said materials from KCO and a supporting letter from the Kenyan government has been sent to UNEP's Paris office, but no reply has been received. Successful completion of this project could strengthen the role of NGOs in encouraging early implementation of the Montreal Protocol in developing countries. It is not clear, however, that Montreal Protocol Parties want the Ozone Fund to finance NGO activities such as this project.

C. Parties Make Ozone Fund Operational

The Executive Committee of the Ozone Fund finally approved the work plans of the fund's three implementing agencies - UNEP, United Nations Development Program (UNDP), and the World Bank, clearing the way for the fund to become operational. The work of the Ozone Fund had gotten off to a slow start in its first year, because the committee got bogged down in administrative details and the three agencies had submitted workplans that overlapped with each other.

1. World Bank Stresses the Role of the GEF

Ken Pittington of the World Bank made a few interventions during the meeting to stress that the Global Environmental Facility (GEF) would be available to assist governments that do not qualify for assistance from the Ozone Fund. He told Friends of the Earth that NGOs have misrepresented the lack of coordination among the three implementing agencies. He assured us that the Bank plans to be innovative in its approach to CFC alternatives. For example, he said it was exploring the possible use of evaporative cooling air conditioning. This type of technology does not rely on CFCs, HCFCs, or HFCs.

2. New Composition of the Ozone Fund's Executive Committee

The Parties elected a slightly different Executive Committee and new chairs. In order to rotate the geographic composition of developing country members, Brazil has been removed and Sri Lanka added. Mexico is now the Chair, and United States is now the Vice Chair. The U.S. will become the Chair the following year. The members of the committee now include: Mexico, United States, Sri Lanka, Finland, Netherlands, Germany, Venezuela, Egypt, Ghana, Malaysia, Jordan, Canada, Japan, and USSR.

3. Next Meeting of the Executive Committee

The Executive Committee will meet for their fifth session on November 18-22 in Montreal.

4. Size of Fund Will Change Due to China's Ratification

China announced in Nairobi that it has ratified the amended Montreal Protocol. The news gave Parties confidence that the Ozone Fund was encouraging global participation in the agreement. Several congratulatory remarks from delegates questioned whether India would soon ratify as well.

China's ratification means the size of the fund for its first three years of operation (1991-1993) will need to rise from US$ 160 million to US$ 200 million. The individual assessments for each government will rise accordingly.

5. Some Developing Countries Exceed CFC Consumption Limit

Under Article 5 of the Montreal Protocol, developing countries that consume less than .3 kilograms per capita of controlled substances per year can delay their compliance with the protocol for up to ten years and qualify for assistance from the Ozone Fund. Data collected under the protocol indicates that Bahrain, Malta, Singapore, and United Arab Emirates have exceed this consumption level. The Parties decided that these governments should be temporarily categorized as not operating

under Article 5.

They also directed the open-ended working group to review all elements of the protocol in order to consider the possible consequences of a country that loses its Article 5 status. The group will look at the following questions: what base year should apply for these countries for the purpose of the reduction schedule; which stage of the reduction schedule should the Party comply with; how long should the Party have to comply fully with the protocol's control measures; and what should be done if this Party is on the Executive Committee of the Ozone Fund.

6. Turkey Requests and Receives Developing Country Status

For purposes of the Montreal Protocol, Turkey is not considered a developing country. In many international forums, however, Turkey is considered a developing country. It also consumes only .07 kg CFCs per capita. For these reasons, Turkey requested that Parties change its status. After much debate, the Parties agreed, but raised concern about reopening the list of developing countries. They requested the open-ended working group to develop criteria for any future applications.

D. Miscellaneous Meeting Items

1. New UNEP Contact Person for Montreal Protocol Information

Mr. Sharma, formerly a member of the Indian Delegation, has replaced John Carstensen as the Coordinator of the Ozone Secretariat at UNEP in Nairobi. Meeting documents and information about upcoming meetings can be received by contacting: Mr. Sharma, Ozone Secretariat Coordinator, Secretariat for the Vienna Convention and its Montreal Protocol, UNEP, P.O. Box 30552, Nairobi, Kenya. Telephone: 2542 333930, Telex: 22068 UNEP KE, Fax: 2542 520550. John Carstensen is now a member of the Danish delegation.

2. Next Meeting of the Parties

The Forth Meeting of the Parties to the Montreal Protocol will be held in Copenhagen in September or October 1992.

E. What Needs to Be Done Now?

1. Strengthening the Montreal Protocol's Control Measures

Parties will have the opportunity to vote on further adjustments and amendments to the Montreal Protocol at their next meeting in 1992. The upcoming twelve months is a critical time for NGOs to coordinate their activities and influence these changes.

The Montreal Protocol Assessment Panels are due to report on their work by December. The panels analyze the latest ozone information on science, effects, technology, and economics. The panel reports provide a basis for Parties to formulate their amendment proposals. The open-ended working group of the Parties will likely convene in January in Geneva to review the panel reports and propose amendment options.

The working group will meet a few times before the Copenhagen meeting. In order to amend the Montreal Protocol, decisions in Copenhagen must be adopted by a two-thirds majority vote of the Parties present and voting, representing a majority of the Parties operating under Paragraph 1 of Article 5 present and voting and a majority of the Parties not so operating present and voting.

The following NGOs actions would be very useful:

a. **Press governments to ratify the London Amendment** if they have not already done so. Twenty governments must ratify the London amendment if it is to enter into force on January 1, 1992. As of now, only New Zealand, Canada, Maldives, and Sweden have deposited their instrument of ratification at the United Nations. In Nairobi, the USSR and China said they had ratified, and other governments said they were in the process of doing so.

b. **Urge governments to propose and support a strong amendment**, especially friendly ones which have agreed to take action beyond the Montreal Protocol. Stress the need to accelerate phaseout dates, steepen interim production cuts, and control HCFCs and HFCs. Use new scientific data to support such actions.

c. **If possible, attend open-ended working group meetings** to lobby delegations on the need for further amendments.

d. **Put pressure on governments domestically.** Use the media to expose governments that are not supporting a strong amendment to the Montreal Protocol. Press for strong national ozone protection legislation if it does not exist. Ensure full implementation if it does.

2. Ensuring Successful Implementation of the Ozone Fund

Now that NGOs have observer status at Ozone Fund meetings, we must use our access to make sure that the fund is used to help developing countries take immediate, environmentally-sound measures to protect the ozone layer. Our biggest challenge is to prevent Parties from using the fund to transfer ozone-destroying or climate-damaging technologies when safer alternatives are available. The fact that Du Pont makes the following arguments in its promotion of HCFCs and HFCs is cause for concern.

"HCFCs and HFCs perform similarly to CFCs and can relatively quickly replace CFCs in developed and developing countries. This minimizes atmospheric chlorine and ozone loss."

"A one to two percent non-compliance to a total CFC phaseout by developing nations contributes more chlorine to the stratosphere than the entire world using the shortest lived HCFCs indefinitely."

Right now, with the help of the ozone fund in developing countries, CFC recycling can be initiated, aerosol manufacturing shifted away from CFCs, and water-based solvents can be adopted. These actions do not run the risk of locking developing countries into use of HCFCs which the industrialized world may soon abandon.

The following NGO actions would be very useful:

a. **If possible, attend meetings of the Executive Committee of the Ozone Fund.** Take an active role in commenting on the committee's work, such as guidelines for project criteria and projects under consideration. General interim guidelines already exist. (See Appendix #7. Draft Report of the Third Meeting of The Ozone Fund Executive Committee, "Project Eligibility Criteria".)

Contact Mr. Omar El-Arini, Chief Officer of the Ozone Fund Secretariat, for information about meetings and an invitation. Coordinate with other NGOs, such as Friends of the Earth, about attendance so we do not have too many observers. Address: Interim Multilateral Fund for the Protection of the Ozone Layer Under the Montreal Protocol, 27th Floor Montreal Trust Building, 1800 McGuill College Avenue, Montreal Quebec, H3A3J6.

b. **Help interested developing country NGOs to attend Executive Committee meetings** in Montreal through financial support.

c. **If your government is a member of the Executive Committee, make contact with the appropriate people** and ask them to keep you informed about the committee's activities.

d. **Find out if the Ozone Fund is considering funding projects in your country.** Check to see if it is the most appropriate alternative to ozone-depleting chemicals. If no projects have been proposed for your country, encourage your government to apply to the fund.

e. **Make sure your government has paid its contribution to the Ozone Fund** if it is required.

The above actions are suggestions for NGO activity. Reactions and alternative ideas are welcome. For further communication or copies of this report, please contact:

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Appendix #1

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ATMOSPHERE

A Publication of Friends of the Earth International on Ozone and Climate Protection

Ozone Layer Thinning Faster

Washington (FoE) - New scientific findings show that the ozone layer above Earth's northern mid-latitudes is thinning twice as fast as scientists had previously thought. The new measurements are the first to show that significant spi ngtime ozone loss is occurring over these densely populated areas.

In the past, scientists had recorded large ozone losses primarily over the sparsely-populated polar regions. In the northern mid-latitudes, however, ozone depletion was milder. Over Washington, DC, for example, ozone depletion averaged — at its worst — about 2.3 percent during wintertime.

But the new data, collected by a NASA satellite from 1978 through 1990, show ozone losses of 3 to 5 percent at 35 degrees North extending into April and May.

The US Environmental Protection Agency (EPA) predicts this accelerated ozone loss will cause an extra 200,000 deaths from skin cancer in the United States over the next fifty years.

In response to the new findings, EPA Administrator William Reilly said he would intensify US efforts to combat ozone depletion. "The implications for policy are unavoidable," said Reilly in the Washington Post on April 5.

An alarmed US public is calling on Reilly to make good on his pledge. Friends of the Earth-USA has petitioned the Administrator to use his authority under the Clean Air Act to accelerate the phaseout of ozone-depleting chemicals and to ensure the safety of alternatives. A letter from 31 US senators did the same.

At a science committee hearing in the US Senate on April 16, a panel of atmospheric scientists voiced their concern. Dr. Robert Watson of NASA said that four actions are needed: an accelerated phaseout of chemicals controlled by the Montreal Protocol; worldwide compliance with the protocol; chemical recycling; and the development of not-in-kind substitutes for CFCs instead of wide adoption of HCFCs. In particular, Watson warned that industry should avoid developing long-lived HCFCs and HFCs.

Dr. Richard Stolarski of NASA, the principle scientist who analyzed the satellite data, testified that the ozone trends worsen closer to the poles. In the northern hemisphere at 45 degrees North, the data show ozone losses greater than eight percent in February and March.

Mechanism Uncertain

Stolarski said scientists are not certain about the mechanism that is causing the accelerated ozone loss in the northern hemisphere.

They believe it may be a chemical process similar to the one causing the polar ozone hole, where chlorine from industrial chemicals reacts on the surface of frozen polar clouds to initiate rapid ozone destruction. At northern mid-latitudes, the surfaces could either be polar clouds or aerosol particles in the stratosphere.

In the Southern hemisphere, scientists have also observed mid-latitude ozone depletion. They believe the breakup of the Antarctic ozone hole may be diluting ozone levels there.

Sherwood Roland of the University of California at Irvine testified that cumulative ozone loss is actually greater than indicated by the new NASA analysis, which only recorded measurements back to 1978.

The 1988 NASA Ozone Trends Panel report covered the period 1969-1986. When Rowland analyzed the two reports together, he said the data show 10 percent ozone depletion in wintertime since 1969 over the Northern half of the United States.

3. Page 4. Decision III/12. The whole text should read as follows:

Decision III/12. Assessment Panels

(a) To request the Assessment Panels and in particular the Technology and Economic Assessment Panel to evaluate, without prejudice to Article 5 of the Montreal Protocol, the implications, in particular for developing countries, of the possibilities and difficulties of an earlier phase-out of the controlled substances, for example of the implications of a 1997 phase-out;

(b) Taking into account the London Resolution on transitional substances (Annex VII to the report of the Second Meeting of the Parties to the Montreal Protocol), to identify the specific areas where transitional substances are required to facilitate the earliest possible phase-out of controlled substances, taking into account environmental, technological and economic factors, where no other more environmentally suitable alternatives are available. The quantities likely to be needed for those areas and for those areas of application currently served by transitional substances shall both be assessed;

(c) To request the assessment panels to identify the transitional substances with the lowest potential for ozone depletion required for those areas and suggest, if possible, a technically and economically feasible timetable, indicating associated costs, for the elimination of transitional substances;

(d) To request the assessment panels to submit their reports in time for their consideration by the Open-Ended Working Group with a view to their submission for consideration by the Fourth Meeting of the Parties;

(e) To endorse Decision II/2, paragraph 2, of the Second Conference of the Parties to the Vienna Convention.

VI. OTHER MATTERS

6. The representative of Switzerland drew attention to the following statement by Sweden, Finland, Norway, Switzerland, Austria, Germany and Denmark (previously contained in document UNEP/OzL.Pro.3/CRP.2):

> "We, the heads of delegations of Sweden, Finland, Norway, Switzerland, Austria, Germany and Denmark, believe that the recent analysis of the state of the stratospheric ozone layer calls for the adoption of more stringent control measures at the Fourth Meeting of the Parties in 1992.
>
> We are also of the opinion that the substitution of the controlled substances with transitional substances must be as moderate and temporary as possible.
>
> We note that the London resolution urges the adoption, in accordance with the spirit of the paragraph 11 of Article 2 of the Protocol, of more stringent measures in order to protect the Ozone Layer.
>
> Because of this we express our firm determination to phase-out the production and the consumption of CFCs, halons and carbon tetrachloride controlled by the Montreal Protocol, as soon as possible but not later than the year 1997 and to phase-out 1,1,1-trichloroethane (methyl chloroform) as soon as possible but not later than the year 2000. We also think it is necessary to tighten the timetable agreed upon in the Montreal Protocol taking due account of the special situation of developing countries.
>
> We are also determined to limit by no later than 1995 the use of transitional substances (HCFCs) to specific key applications where other more environmentally suitable alternative substances or technologies are not available, and to phase-out their use in those areas as soon as technically feasible."

Appendix #4

CRUCIAL NEXT STEPS TO PROTECT THE OZONE LAYER

A STATEMENT TO THE PARTIES TO THE MONTREAL PROTOCOL FROM ENVIRONMENTAL NON-GOVERNMENTAL ORGANIZATIONS

Third Meeting of the Parties
Nairobi, Kenya
June 19-21,1991

Once again, the parties to the Montreal Protocol meet at a time of crisis for the ozone layer. Recently released satellite data from the U.S. space agency shows that the ozone layer is deteriorating twice as fast as scientists thought last year when the Protocol was amended in London. The U.S. Environmental Protection Agency estimates that this will result in 200,000 additional skin cancer deaths in the United States over the next 50 years.

Once again, the Montreal Protocol must be strengthened. Environmental NGOs from around the world call upon governments to take all possible steps, at both international and national levels, to eliminate all ozone-depleting chemicals as rapidly as possible.

Alarming New Science

The Antarctic ozone hole appears annually at record or near-record size. Large ozone losses have also been measured in the Arctic.

Over the heavily populated mid-latitudes of Europe, North America and Asia, the ozone layer has been weakened by as much as 10% since 1969 during late winter and early spring. Ozone losses are even more severe over Scandinavia, northern Canada, and the northern U.S.S.R., and over southern Australia and New Zealand.

More Can and Must Be Done

Ozone depletion -- and the greenhouse effect -- will steadily worsen because the Montreal Protocol, even as amended in London, allows millions more metric tonnes of CFCs, halons, methyl chloroform and carbon tetrachloride to be produced throughout the next decade. The Protocol also places no controls on the production of ozone-depleting and global-warming substitutes, the HCFCs and HFCs.

Yet leading governments and industries are showing that CFCs and other controlled chemicals can be eliminated more rapidly, and that the need for HCFCs and HFCs can be held to a minimum.

A growing number of countries have set national or regional phase-out deadlines far earlier than the Protocol's. Several countries and the European Community will complete their CFC phase-outs by 1997.

Germany will eliminate production of methyl chloroform and carbon tetrachloride by January 1993, halons by January 1994, CFCs by January 1995, and HCFC-22 by January 2000. And with promised help from the multilateral fund, Mexico has made a commitment to eliminate CFCs on the Protocol's schedule now applicable to the industrialized nations.

Industries are developing a diversity of new alternatives at a remarkable pace. Cost estimates for a phase-out continue to tumble.

Crucial Next Steps

We call upon all nations immediately to ratify, and implement fully, the Montreal Protocol as adjusted and amended in London.

We call upon the Parties to commit this year to strengthen the Protocol in 1992. The most crucial adjustments and amendments are:

Accelerate and Broaden the Phase-Out. (Deadlines proposed here are for industrial countries; developing countries are addressed below.)

* **CFCs and Other Controlled Substances:** The Protocol should call on all nations to end production and consumption of CFCs, halons, methyl chloroform, and carbon tetrachloride immediately. The absolute deadline for phasing out these chemicals should match or exceed the timetables set by Germany (mentioned above.)

* **HCFCs:** The Protocol should prohibit production and consumption of long-lifetime HCFCs and HCFC blends with an ozone depletion potential greater than .02 by 2000. Production and consumption of shorter-lifetime HCFCs should be prohibited shortly thereafter. HCFCs should be confined to essential applications, where chlorine free substitutes are not yet available.

* **HFCs:** Recognizing that long-lifetime HFCs contribute significantly to global warming, and that these compounds are coming into use due to the Protocol's control measures, the Protocol should prohibit production and consumption of HFCs with long lifetimes.

Assistance and Deadlines for Developing Countries: The Protocol should increase the multilateral fund to provide developing countries with the additional financial and technical assistance necessary to enable them to eliminate controlled chemicals on a schedule as close as possible to developed countries. The fund should ensure that environmentally sound technology appropriate to the development needs of these countries is made available.

Recovery and Recycling: The Protocol should require maximum recovery and recycling of controlled chemicals, including HCFCs and HFCs, in all industrial processes and during the service and disposal of products containing these chemicals.

Public Data Reporting: The Protocol should require governments to report and publish statistics regarding the production, major use, import, and export of all ozone-destroying chemicals from each individual company and production facility.

Labelling: The Protocol should require adoption of internationally standardized warning labels for all products containing or made with ozone-depleting chemicals.

Strong National Ozone Policies

We urge each nation to adopt and implement aggressive national ozone protection policies at the earliest possible date. No nation can responsibly defer action until the Montreal Protocol is further amended. Individual governments also should adopt economic instruments, such as a tax on ozone-depleting chemicals, to raise revenue for public investment in environmentally safe alternatives.

June 19, 1991

Australian Conservation Foundation
Chikyu no Tomo (Japan)
Climate Network-Europe
Earthwatch (Ireland)
Environmental Defense Fund
Federacion Amigos de la Tierra
Friends of the Earth - Canada
Friends of the Earth International
Friends of the Earth - USA
Kenya Consumers' Organization
Natural Resources Defense Council (USA)
REDES (Uruguay)
Vereniging Milieudefensie (Netherlands)
World Wildlife Fund - Australia

OZONE PROTECTION CAMPAIGN

Appendix #5

For Immediate Release
June 21, 1991

PRESS RELEASE

Environmentalists Say Ozone Meeting Lacks Urgency

Despite recently released scientific evidence showing that ozone depletion is already double predicted levels in parts of the Northern Hemisphere, governments have failed to make a commitment to stronger controls on ozone-destroying chemicals. Many nations are represented in Nairobi this week at the Third Meeting of the Parties to the Montreal Protocol, the international treaty to protect the ozone layer.

"Ozone depletion is even more serious in the Southern Hemisphere, but instead of commiting to stronger action, governments have proposed to study the feasibility of further measures," says Liz Cook of Friends of the Earth-USA. "Current timetables for eliminating these harmful compounds are dangerously slow."

Under the Montreal Protocol, industrialized nations must phase out chlorofluorocarbons, halons, and carbon tetrachloride by 2000, and methyl chloroform by 2005. Developing nations have up to ten extra years to comply with the treaty. Several nations, however, have already committed to exceeding these deadlines.

The best news of the meeting came from an announcement by China that they had ratified the Montreal Protocol. Their action is in response to the recent establishment of a fund to pay the costs of implementing the treaty in developing nations.

"After a year of administrative and procedural hold-ups, the Ozone Fund is prepared to provide funding," says Robert Hornung of Friends of the Earth-Canada. Governments decided at the meeting that non-governmental organizations can observe meetings of the Ozone Fund. Kenya was one of several countries supporting this decision.

The environmentalists noted that seven countries issued a statement at the meeting confirming their commitment to take action beyond that required by the ozone treaty. They will eliminate most of the harmful chemicals by 1997 at the latest and methyl chloroform by 2000. These countries include: Sweden, Switzerland, Norway, Austria, Germany, Denmark, and Finland.

FOE

FRIENDS OF THE EARTH INTERNATIONAL

FOE International Secretariat
26-28 Underwood Street
London N1 7JQ
England

The merchants of pollution . . . Do we care about the environment?

Chemicals that pose danger

DESPITE the recently released alarming data showing that the ozone depletion is deteriorating twice as fast as scientists thought last year, and that an additional 200,000 skin cancer deaths in the US will result in the next 50 years, the parties to the Montreal Protocol seem to have missed the sense of urgency of the whole matter, writes Anne Kamande.

Two weeks ago the third meeting of the parties to the Montreal Protocol was held at UNEP in Gigiri. Environments of the Friends of the Earth (FoE) International Ms Liz Cook and Mr Robert Hornung, expressed their disappointment that even after the scientific evidence provided at the meeting, governments were still continuing to move slowly.

"Ozone depleting is even more serious in the southern hemisphere but instead of governments committing to stronger action, governments have proposed to study the feasibility of further measures," Ms Cook explained.

She noted that the ozone layer discussion at the UNEP was not enough in addressing the problem which she said had become a priority issue and therefore called upon governments to take all possible steps at both international and national levels to eliminate all ozone depleting chemicals as quickly as possible without waiting for the protocols phase-out deadlines which she noted were dangerously slow.

Kenya being one of the governments that ratified the International Ozone Treaty, participated and said it was not enough to just ratify the convention and the protocol.

Kenyan participants felt that concrete steps must be taken to achieve the objective of these instruments, if it was to ward off the impending disaster and give humanity better chance of survival.

It is with this in mind that the Kenya Consumers Organisation (KCO), in its endeavour to contribute to this global concern carried out a survey of the ozone depleting chemicals in the country.

According to this survey, Mombasa has the lion share of the ozone depleting chemicals amounting to 65 per cent of the total used in the country. Most of these chemicals are used for heat transmission purposes, especially in refrigeration systems which explains why Mombasa, a hot and humid town is leading followed by Kisumu, which is also hot accounting for 23 tonnes which is the same as 24.5 per cent of the total 95 tonnes.

Nairobi, despite being the largest city in the country with a vastly bigger population, and a large concentration of industries, uses only 10.2 per cent of the total ozone depleting chemicals.

It was also noted that the use of the ozone friendly chemicals was present in some of the industries with Nairobi leading with 65 per cent of these chemicals which meant that with a bit of education, they could be used to substitute the dangerous ozone depleting chemicals.

Surprisingly, the user companies visited revealed that the source of these chemicals was by local suppliers which included 17 companies.

Nearly all the suppliers admitted that they label their containers as carrying ozone depleting chemicals. But it seems that even with these labels, many of the users are unaware of the dangers posed by the chemicals to the environment with as many as 86 per cent unaware of the existence of alternatives to the ozone depleting chemicals.

It is also important to note that most of the ozone depleting chemicals users, methods of disposal pose dangers to the environment with as many as over three quarters not even attempting to conserve or even recycle these chemicals.

The results of the survey therefore show that there is lack of knowledge in the following areas which include dangers to the ozone depleting chemicals, information and training in proper use of these chemicals, presence of alternative chemicals or technologies, precautionary measures in the use of these chemicals and proper disposal methods.

With all these facts before us, what then is this thing called ozone layer? And how important is it to us as human beings and as Kenyans? And how can each one of us contribute to the protection of this layer? For anyone to contribute, one needs to understand what the issues is all about and how serious the present situation is.

Ozone is a form of oxygen present in the atmosphere in small quantities. About 90 per cent of it is being found in what is called the stratosphere. According to the survey, the Ozone layer shields the human kind from much of the sun's harmful ultra-violet radiation while at the same time, controls the structure of the atmosphere hence influencing the climate.

One can therefore see the importance of the ozone layer not only to mankind, but also to the plants and animals. In the 1982 however, an ozone hole was discovered in the Antarctic and it has been established that the ozone concentration in this area drops by upto 30 per cent for a few weeks every year during spring.

According to another scientific discovery, a similar but small hole may be developing in the Arctic as well. The ozone hole is directly attributed to chloroflourocarbons (CFCs) which are man made substances whose structure corresponds to those of the aliphatic hydrocarbons such as methane but in which the hydrogen atoms have been replaced fully or partially by chlorine and/or flourine atoms.

This unfortunate disadvantage of CFCs arises from their particular stability and their chlorine content which enables them to escape to the upper reaches of the atmosphere, the stratosphere which is the ozone layer located at 15-30 altitude.

At this level, due to the presence of high energy solar radiation, the CFCs break up releasing free chlorine atoms which then react with the ozone, depleting the same.

The completely halogenated CFCs, that is, those in which the hydrogen atoms have been replaced fully, are more stable than the incompletely halogenated ones and their effect on the ozone layer depletion is correspondingly greater.

According to the survey results, CFCs in Kenya, are mainly used as propellants in cosmetics, hair spray, deodorants and pharmaceutical sprays such as asthma inhalers. When used as propellants, CFCs are produced when the spray cans are pressed to release the spray and when the old cans are discarded.

CFCs are also used as foaming agents in the manufacture of various foam plastics. In the flexible foam used mainly for mattresses, furniture, packing material, or the moulded form used mainly in furniture and car seats, CFC is used for blowing to produce a lower density of the resulting foam.

In this case, emission of the CFCs occur during the manufacturing process or when the material is damaged or destroyed.

CFCs have also been used in the refrigeration systems as heat transmission agents which include cold-rooms, air-conditioners, refrigerators, and freezers for both domestic use and industrial purposes.

In these systems, usually, the CFC is pumped around in a sealed unit in such a way that it either takes the heat away from where it is not wanted such as inside a freezer to where it is wanted as in heat pumps. It is also incorporated in the insulation foam in order to reduce the total energy needed to maintain the desired temperature.

In the refrigeration systems, CFCs usually occur during manufacturing and servicing when charging or draining the material or even in cases of t leakage in pipes and when refrigerators and freezers . discarded

In drycleaning clothes a furs, and in the electronics dustry during the manufact of printed circuit boards and cleaning or degreasing drying of optical equipme photographic equipmen weapons and aerospace comp nents and computer CFCs are used

In the survey, it was vered that most clea done in open systems allow evaporation of CFC the atmosphere. It wa discovered that CFCs clude sterilisation of equipment in which CFC mixed with ethylene o this purpose, and is during the process as a r leaks and accidental rel

It is also commonly freeze drying of foodstu in polyvinal foam plastic for packaging, furniture, on appliances, and TV

Other substances wh hibit similar chemical str to the CFCs ry bromine, chlori atoms are the ha used almost exclusively extinguishing purposes

It has been proved by tists that their ozone depl factor is higher than th CFCs although in Kenya, are not used in similarty quantities

If therefore the prote ozone layer is destroyed b CFCs that are commonly the hard ultra violet radia which is usually to absorbed in the upper a phere, would reach the phere.

This would result in the sive damage to all the functions of both plants and would trigger humans, skin cancers, burn, slow blindness, eye age, aging and wrinkling c skin, and suppression o immune functions, etc.

In plants, many dom crops will produce lower y and timber production w fall. A decrease in the str pheric ozone level could in an increase of the lower known as the troposphere ing the greenhouse effect is the trapping of earth's surface quent global w

This would e od o of the sea, agricultural and rise in the sea-level th threatening the coastal a land areas.

It is for these reasons Kenya is concerned abou issue and welcomes g efforts being made to re this situation. With the res this survey, being made able to the implementing cies which include the Bank, UNEP, UNDP, hopes to try and eradica ozone depleting chem with the help of the ozone

It has also been noted technical possibilities co considerable reductions consumption or emission in the short term and long term. The magnitu the reductions will, how depend on the level of exp ture acceptable to the in but more so on the co ment of the governmen the industry.

Using the existing tech gy, consumption of CFCs be reduced by recycling production, substitution CFC by other chemical ances, minimization volume of CFC in heat and large refrigeration sy recovery of CFC in conju with servicing and scrapp all types of installation changing to other sterili methods such as the autoclaves.

SECTION III

III. PROJECT ELIGIBILITY CRITERIA

This section proposes interim project eligibility criteria based on decision II/8 and Annex I of the Second Meeting of the Parties. These criteria will be clarified in the process of preparing country studies and in project-specific review and approval between the Parties and implementing agencies. This is therefore intended to be a flexible document and shall be reviewed after one year experience following its adoption.

III.1 CRITERIA

(1) Financial and technical assistance from the Multilateral Fund shall be available only to Parties operating under Article 5, paragraph 1 of the Montreal Protocol and in compliance with the requirements of the Protocol. Such assistance shall be available only to facilitate compliance with the control measures set out in Articles 2A to 2E of the Protocol (decision II/8, paragraph 1) and to finance the incremental costs incurred in meeting these requirements.

(2) All projects[2] must receive approval of the requesting Party's government.

(3) Financial assistance for capital investment projects shall be available for categories of agreed incremental costs identified in decision II/8, Appendix I of Annex 4 of the Report of the Second Meeting of the Parties[3] (Attached as Appendix I of this report). Assistance for other categories of agreed incremental costs associated with capital investment projects requires approval of the Executive Committee.

(4) Projects other than capital investment projects shall also qualify for assistance under the Fund (e.g. technical assistance and clearing house functions).

(5) Financial and technical assistance shall be available for projects that are cost-effective and based on environmentally sound alternative technologies or substitutes to the substances restricted by the Protocol, taking into account the national industrial strategy of the recipient Party (decision II/8 Appendix I, paragraph 1a of Annex 4 of the Report of the Second Meeting of the Parties).

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2) The term "projects" is used to describe any activity qualifying for assistance under the Fund. A project could include, inter alia, training, technical assistance, pre-investment studies, country programme preparation, technology development or capital investments to modify or establish a manufacturing facility.

3) Further refinement over time will be needed to implement the terms of reference adopted in London defining incremental costs.