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Executive Committee of
the Multilateral Fund for the
Implementation of the Montreal Protocol

Thirteenth Meeting
Montreal, 25-27 July 1994

REQUESTS FOR BILATERAL CONTRIBUTIONS

This document consists of:

- Comments and recommendations from the Fund Secretariat
- Progress reports from Australia, Canada, the Republic of Singapore, and the United States of America
- Requests from the Republic of France, the Republic of Singapore, and the United States of America

COMMENTS AND RECOMMENDATIONS FROM THE FUND SECRETARIAT

Comments

1. The comments and recommendations from the Fund Secretariat are provided on the progress reports for bilateral activities and the requests from the Republic of Singapore and the United States of America to offset bilateral activities against their 1994 contributions.

PROGRESS REPORTS FOR BILATERAL ACTIVITIES

2. Pursuant to the decision of the Fifth Meeting of the Executive Committee which states:

"A progress report on bilateral or regional activities, including financial reporting, should be submitted by the donor country to the Secretariat semi-annually." (UNEP/OzL.Pro/ExCom/5/16, Annex IV, "Bilateral and regional Cooperation", para. 11),

the Fund Secretariat requested progress reports on the ongoing bilateral activities of Australia, Canada, the Republic of Singapore, the Republic of South Africa, and the United States of America. Reports were received from Australia (Annex I), Canada (Annex II), the Republic of Singapore (Annex III), and the United States (Annex IV).

Australia

3. The Executive Committee has approved three projects as offsets to the contributions to the Fund from the Government of Australia. Two projects of the three projects have been previously reported completed and were reported in previous reports.

4. The remaining Australian bilateral project was approved at the last meeting of the Executive Committee. The project, "Support to participants to the regional workshop on refrigeration and air conditioning training programme" was approved in the amount of US \$66,800. The activity has been subsequently completed and the enclosed progress report states that the final cost of the project to Australia was US \$58,860. The Government of Australia requests that the Treasurer make the appropriate adjustments against Australia's contributions.

Canada

5. The Executive Committee has approved three projects as offsets to the contributions to the Fund from the Government of Canada. Two of the three projects, ODS Elimination workshops in Brazil and in China, were reported completed. Progress and a budget adjustment were reported on the remaining project, "Halon management programme in Venezuela". The

project is expected to be completed this autumn. Through its progress report, the Government of Canada has informed the Committee that it is revising the cost of its bilateral offset in the amount to CDN \$373,900 (US \$270,942 according to the UN exchange rates as at June 1994) and requests that the difference in the amount of funds expended should be offset against future requests from the Government of Canada.

Republic of Singapore

6. At its Eleventh Meeting, the Executive Committee approved a request from the Government of the Republic of Singapore for the cost of project, "Regional Seminar on methyl chloroform elimination," to be offset against the Republic of Singapore's 1993 contributions to the Fund. The progress report states that the seminar will be held in March 1995 and will focus on the dissemination of information concerning the adaptation of technologies for methyl chloroform elimination to local circumstances for the ASEAN countries.

United States of America

7. The Executive Committee has approved 21 projects as offsets to the contributions to the Fund from the Government of the United States of America. Eight projects were reported completed in previous reports to the Committee and are not listed in this progress report. Of the remaining 13 projects, the United States is reporting that seven more projects have been completed and progress was reported for the remaining six projects. Thus far, of the 20 projects approved as US bilateral activities, 70 per cent have been completed.

8. Training workshops for 40 MAC technicians and shop managers was held in Venezuela in May and 18 MAC recycling machines have been distributed to the participating service shops. The progress report also indicates that the United States has worked with UNDP in providing training and other support activities and has installed halon 1211 recovery/recharge machines in China, Ecuador, Uruguay, and Venezuela.

**REQUEST FOR BILATERAL CONTRIBUTIONS
REPUBLIC OF FRANCE**

9. Pursuant to Article 10 of the Protocol as amended and Decision IV/18 of the Fourth Meeting of the Parties, the Executive Committee is charged with assessing bilateral requests.

10. A request was received from the Government of France (Annex V) to credit US \$44,000 in bilateral assistance against its 1994 contribution to the Fund. The assistance will be provided for country programme preparation in Mauritania.

General Comments

11. The proposed country programme preparation activities in Mauritania are projected to be undertaken during the period July to September 1994.

12. This represents the first request for an offset of bilateral activities against the contribution of the Republic of France to the Fund.

Recommendation

13. This request complies with the bilateral contribution guidelines (UNEP/OzL.Pro/ExCom/5/16, paragraph 55) and the criteria for assessing costs as bilateral contributions (UNEP/OzL.Pro/ExCom/7/22/Rev.1, page 4). The requested amount does not exceed 20 per cent of the French contribution to the Fund for the year 1994.

14. It is, therefore, recommended that the French Government's request should be approved and the Treasurer should credit the requested amount, US \$44,000, accordingly.

REQUEST FOR BILATERAL CONTRIBUTIONS REPUBLIC OF SINGAPORE

15. Pursuant to Article 10 of the Protocol as amended and Decision IV/18 of the Fourth Meeting of the Parties, the Executive Committee is charged with assessing bilateral requests.

16. A request was received from the Government of Singapore (see Annex VI) for the project, "Training Workshop on CFC-113 and Methyl Chloroform Substitute and Alternative Technologies", to credit US \$40,000, in bilateral assistance against its 1994 contribution to the Fund.

General Comments

17. The project will provide training on quality control and evaluation methods for the use of CFC-113 and methyl chloroform alternatives. The project includes the cost of research and evaluation studies, conference facilities and materials, expert speakers, and the travel and per diem costs for 10 participants from ASEAN countries. The project is proposed to be implemented in mid-1995.

Recommendation

18. This request complies with the bilateral contribution guidelines (UNEP/OzL.Pro/ExCom/5/16, paragraph 55) and the criteria for assessing costs as bilateral contributions (UNEP/OzL.Pro/ExCom/7/22/Rev.1, page 4). The requested amount does not exceed 20 per cent of the Singapore contribution to the Fund for the year 1994.

19. It is, therefore, recommended that the Singapore Government's request should be approved and the Treasurer should credit the requested amount, US \$44,000, accordingly.

**REQUEST FOR BILATERAL CONTRIBUTIONS
UNITED STATES OF AMERICA**

20. Pursuant to Article 10 of the Protocol as amended and Decision IV/18 of the Fourth Meeting of the Parties, the Executive Committee is charged with assessing bilateral requests.

21. A request was received from the Government of the United States of America (Annex VII) to credit US \$1,629,000 in bilateral assistance against its 1994 contribution to the Fund. The assistance will be provided for 12 activities all individually costing below US \$500,000.

General Comments

22. Project preparation activities in Argentina, China, Mexico, and Panama represent a substantial portion of the total request from the United States. Project preparation is identified for activities in the solvents and refrigeration sectors in Mexico; in the foam sector in Argentina; and, in the halon sector in China and Panama. Project preparation in the Mexican refrigeration sector will also include the development of an initial sectoral strategy for the commercial refrigeration sector.

23. Projects leading to the ODS phase-out of 77 ODP tonnes are being proposed for Ecuador, Mexico and Venezuela. The demonstration project in Mexico is estimated to phase-out 25 metric tonnes of CFC-12. The project includes installing recycling machines at 20 repair shops after workers from the repair shops have attended a MAC recycling workshop conducted by Mexico and the United States. The project will also collect and analyze MAC sector data and performance data on the installed recycling/recharge machines which will be documented in a report on the demonstration. The data gathered in this project will be used in designing and implementing a comprehensive national programme as part of a subsequent project.

24. The demonstration project in Venezuela is also estimated to phase-out 25 metric tonnes of CFC-12. MAC recycling equipment has been provided by UNDP through its Global MACs project. As with the project in Mexico, the performance of the demonstration will be documented in a report.

25. Technical assistance will be provided for the development of halon sector assessments in Ecuador, Panama, Venezuela and Uruguay. The United States provided training in the operation of halon 1211 recycling/recharge machines procured through funds provided in UNDP's Global halon project and through funds provided by the United States for the machine delivered to Ecuador. These projects are expected to result in the phase-out of 27 ODP tonnes of halon 1211. Other technical assistance is being provided in some of these projects that will lead to the development of standards for halon alternatives and critical uses and halon management plans.

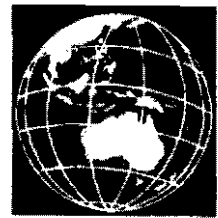
26. The project, "Cancun chiller workshop", represents the additional costs incurred in completing the last of five workshops held in 1993. The United States provided training, workshop manuals and other presentation material. It is estimated that the chiller workshop programme in Mexico might result in a 50 per cent reduction in the estimated 22 tonnes of CFCs leaked due to improper servicing, venting, and leaks.

27. The regional activity entitled, "Low consuming countries/Caribbean and Latin America", is proposed as collaborative effort between UNIDO and the United States to develop a manual for use by low-consuming countries in their efforts to reduce reliance on ozone depleting refrigerants. The project includes field testing to refine the material included in the manual.

Recommendation

28. This request complies with the bilateral contribution guidelines (UNEP/OzL.Pro/ExCom/5/16, paragraph 55) and the criteria for assessing costs as bilateral contributions (UNEP/OzL.Pro/ExCom/7/22/Rev.1, page 4). The requested amount does not exceed 20 per cent of the United States' contribution to the Fund for the year 1994.

29. It is, therefore, recommended that the United States of America Government's request should be approved and the Treasurer should credit the requested amount, US \$1,629,000, accordingly.

**CEPA****Commonwealth
Environment
Protection Agency**

Dr Omar E. El-Arini
Chief Officer
Multilateral Fund for the Implementation of the Montreal Protocol
1800 McGill College Ave
Montreal Quebec
CANADA

Dear Dr El-Arini

I refer to your letter of 20 May 1994 requesting a progress report on bilateral activities.

I am pleased to inform the Executive Committee that the approved project *Conference and Workshop on the Protection of the Ozone Layer* was completed in Jakarta on 15 April 1994.

The final cost of the project to Australia was US \$58,860. It would be appreciated if you would make the appropriate adjustment to the amount previously credited against Australia's contribution to the Multilateral Fund for 1994.

The UNEP Regional Office for Asia and the Pacific, co-sponsors of the project, will be providing a full report to the Executive Committee.

Yours sincerely

Dianne Gayler
Assistant Secretary
Pollution Avoidance Branch

15 June 1994

Environment
CanadaEnvironnement
Canada

Ottawa, Ontario
K1A 0H3

June 10, 1994

Dr. Omar El Arini
Chief Officer
Multilateral Fund Secretariat
1800 McGill College
27th Floor
Montreal, Quebec

Dear Dr. El Arini:

Subject: Update on Canadian Bilateral Activities

Thank you for your letter of May 20, 1994.

I am pleased to submit for your consideration, an update on Canada's bilateral activities under the Multilateral Fund as implemented in Brazil, China and Venezuela.

Our programs in China and Brazil are complete, although we plan to request Executive Committee approval in the near future for additional projects in these countries as a follow-up to the workshops that were held in September and October respectively.

The program in Venezuela is still underway with the majority of work scheduled for completion this fall. I should point out that our original request for approval in the amount of US\$ 414,000 was based on the inclusion of procurement of Halon 1301 recycling equipment. We have since reached agreement with Venezuela and UNDP that the development of specifications for this equipment would be included in the Canadian program but that actual procurement would be by the UNDP. Accordingly, the amount of the bilateral has been revised to CAN\$ 373,900. We propose that the unused portion be reallocated to future Canadian bilateral programs once approved by the Executive Committee. Thank you.

...2

Canada

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- 2 -

Yours truly,

A handwritten signature in black ink, appearing to read "Doug Russell for". The signature is stylized and cursive.

Doug Russell
Director
Air Issues Branch
Pollution Prevention

cc: John Reed, Steve Gorman

**UPDATE ON CANADIAN BILATERAL PROGRAMMES IN BRAZIL, CHINA AND VENEZUELA
UNDER THE MONTREAL PROTOCOL MULTILATERAL FUND**

I. BRAZIL

Project Title: ODS Elimination Workshop in Brazil

Incremental Costs: US \$172,500

Project Description: To hold a training workshop in Sao Paulo to facilitate the transfer of ODS phase-out technology between Canadian and Brazilian industrial representatives. This workshop will focus on the refrigeration and air conditioning sector. Training is viewed as a first step in a broader program of assistance: It is expected that this workshop will lead to the identification of additional areas of cooperation including training in recovery and recycling, capital investment projects for ODS conversions, technical assistance, institutional strengthening, etc.

Status/Outputs:

A Canada-Brazil workshop on ODS elimination was held Sept. 8-10 in Sao Paulo. The purpose of the workshop was to provide technical and policy assistance to Brazilian industry and government in the reduction of ODS, utilizing Canadian experience, technology and expertise. This workshop was the first-ever of its type for Canada and Brazil.

The workshop included science and policy presentations by Environment Canada officials as well as technical presentations by Canadian companies whose technologies focus on CFC reduction, recovery and recycle in refrigeration and air conditioning sector. Representatives from the Implementing Agencies and the Brazilian government also made presentations. 27 Brazilian companies were in attendance in addition to regulatory authorities. Opportunities during the event were maximized to allow for both structured and informal industry-to-industry interaction. One day was reserved for visits by Canadian firms to Brazilian counterparts. The industry-to-industry format was highly successful, providing opportunities for Brazilian and Canadian companies to exchange ODS control technology through a variety of business arrangements. The workshop also featured an extensive demonstration of the Environment Canada National Action Plan (NAP) on CFC Recycle, including the Environment Canada/Heating Refrigeration and Air Conditioning Institute service technician training programme (Which has been given to over 40,000 Canadian service technicians to date). The NAP is a centrepiece of Canada's Ozone Layer Protection programme and is considered to be a key offerable to developing countries.

Future Activities:

Feedback during and at the conclusion of the workshop was very positive by both Brazilian and Canadian participants. The event itself served to stimulate energy and debate within Brazil regarding their strategy to eliminate ODS. Canadian industry participants reported that several promising project ideas and business contacts were developed. Several potential follow up

Update on Canadian Bilateral Programmes under the Multilateral Fund, 10 June 1994

activities were identified, including: Canadian assistance in completing Brazil's Country Programme, in-Canada policy training for Brazilian Government officials, Canadian assistance in project preparation, establishment of demonstration projects in CFC recycling and recovery (including training), in-Canada visits by Brazilian industrialists, and establishment of an ODS Refrigerant Conservation programme.

It is Canada's understanding that implementation of any followup projects is being held in temporary abeyance pending completion and subsequent Executive Committee approval of the Brazilian country programme. Canada is keen to pursue such followup initiatives.

II. CHINA

Project Title: ODS Elimination Workshop in China

Incremental Costs: US \$172,500

Project Description: To hold a training workshop in the Province of Sichuan to facilitate the transfer of ODS phase-out technology between Canadian and Chinese industrial representatives. This workshop will cover all industrial sectors and will feature Canadian technology and expertise.

Status/Outputs: A Canada-China workshop on ODS elimination was held Oct. 4-8 in Chengdu, Sichuan Province, China. Ozone layer protection is one of the fields of cooperation identified within the framework of the Memorandum of Understanding on Environmental Cooperation between the Department of the Environment for Canada and the National Environmental Protection Agency (NEPA) of the People's Republic of China. In addition, China recently prepared its Country Programme on ODS Elimination, headed by NEPA. Canada's efforts in Sichuan are being undertaken in concert with the United Nations Development Program (UNDP is the lead agency in China) and the World Bank.

Over 75 senior Chinese delegates participated. This workshop was very similar in sponsorship, overall format and objectives to the Brazil workshop. This workshop was the first-ever of its type for Canada and China. The workshop included policy presentations by Environment Canada officials as well as technical presentations by Canadian companies whose technologies focus on CFC/halon reduction, recovery and recycle in the refrigeration and air conditioning, fire protection and aerosols sectors. Representatives from the World Bank and UNDP as well as Chinese authorities (including NEPA) also made presentations. The workshop also featured sessions on research and Development by the National Research Council (NRC) as well as a presentation on Environment Canada's National Action Plan (NAP) on CFC Recycle, including the Environment Canada/Heating Refrigeration and Air Conditioning Institute service technician training programme. The industry-to-industry format proved highly successful with several possible follow up projects identified and preliminary business relationships established.

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Future Activities:

The following areas of possible future cooperation were identified during the workshop: Technical assistance to develop a Sichuan ODS action plan; Technical and management training for implementing the Montreal Protocol; To carry out a feasibility study for the establishment of a Refrigerant Conservation Programme for Sichuan province; Several projects with the potential to significantly reduce the production and use of halons in Sichuan.

Since completion of the workshop, discussions have been underway to implement some of the priority follow up activities. In particular, Canadian and Chinese officials have reached agreement on the terms of reference for a feasibility study to establish an ODS conservation programme in the Province of Sichuan. This will be presented to the Executive Committee for approval prior to the 13th meeting of the Executive Committee.

It should be noted that Environment Canada also intends to seek Executive Committee approval for co-sponsorship of a technical training workshop on solvent elimination to be held in Beijing in October under the joint sponsorship of Northern Telecom Canada and ICOLP.

III. VENEZUELA

Project Title: Halon Management Programme in Venezuela

Incremental Costs: US \$414,000 (Revised to CAN\$ 373,900)

Project Description: Environment Canada entered into an agreement with Venezuela to provide technical assistance in the area of fire protection alternatives and halon management under the bilateral cooperation provisions of the Montreal Protocol Multilateral Fund. The purpose of the program is to share Canadian experience and expertise in assisting Venezuela to develop a made-in-Venezuela halon management program. The program includes:

- organization meetings and establishment of a steering committee led by local authorities (COVENIN)
- development of a halon management plan based on
 - usage and use patterns
 - alternatives and replacements
 - optional models for banking
- specifications for halon 1301 recycling technologies to be subsequently procured by UNDP
- a technology transfer/demonstration mission to Canada for 10 Venezuelans in the fall
- a training course on fire protection engineering and technology transfer workshop to

Update on Canadian Bilateral Programmes under the Multilateral Fund, 10 June 1994

be held in Caracas

- ongoing follow-up to ensure effective implementation.

It should be noted that this work is being closely coordinated with that of the USEPA in the area of halon 1211 assistance.

Status/Outputs:

Environment Canada has awarded a contract to Mr. Gary Taylor of Taylor/Wagner Inc. to undertake this work. Mr. Taylor is recognized as a world expert on this topic and is currently Chair of the UNEP Halons Technical Options Committee of the Technology and Economics Assessment Panel. The project is well underway. All organizational meetings have been held and a local steering committee established. A first draft report of the halon management plan has been submitted to the Venezuelans and will be discussed over the coming months.

Future Activities: The completion of the halon management plan and training workshops on fire protection alternatives is expected in the fall. UNDP has agreed to procure any halon 1301 recycling and recovery equipment. Followup activities to monitor the effectiveness of the management plan implementation with the Venezuelans are planned for two years.

ANNEX III

REPUBLIC OF SINGAPORE

PROGRESS REPORT

REGIONAL SEMINAR ON METHYL CHLOROFORM ELIMINATION

- PROGRESS REPORT

1. The planning and organisation of the seminar is in progress. The seminar will be held in March 1995 at the Singapore Institute of Standards and Industrial Research (SISIR).
2. Seminar speakers are being identified and participants from Article 5 countries in the region are being invited to the seminar.
3. The topics that will be discussed at the seminar are :
 - a. Country programme to phase out methyl chloroform (MCF)
 - b. Progress and success in MCF elimination
 - c. Alternatives and substitutes for MCF
 - d. New technologies that avoid use of MCF
 - e. Development of cleanliness standards and methods to measure the cleanliness



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

UPDATE OF EXISTING BILATERAL ACTIVITIES
(as at June 1994)

COUNTRY HIGHLIGHTS

COUNTRY HIGHLIGHTS

CHINA

EPA met with the Ministry of Public Security (MPS) in April 1994. MPS recently formed a committee with key members from the Leading Group for Halon Replacement and Factory Conversion for China's Firefighting Industry to develop a detailed halon elimination strategy to be completed in the near future. MPS reported good overall use of the 23 halon recovery/recharge machines (provided by UNDP and EPA), in conjunction with three training workshops conducted by EPA and the U.S. Navy with UNDP support) and provided preliminary data on the operation of the machines. Machines are operating in fire extinguisher service shops, halon factories, and fire equipment factories in Beijing, Tianjin, Shandong Province, Zhejiang Province, Jiangsu Province, Guangdong Province, and Shanghai. EPA is reviewing the initial information and is working with MPS to develop a more complete reporting of data on all of the machines that will be deployed to China. MPS and EPA also agreed to pursue further halon phaseout activities. During this mission, EPA also discussed CFC phaseout activities in meetings with NEPA, the Ministry of Chemical Industry, and the Ministry of Internal Trade.

ECUADOR

In February 1994, EPA cooperated with the Government of Ecuador in the completion of a halons assessment. Under the Global Halons Project, EPA delivered one halon 1211 recovery/recharge machine to Ecuador. In June 1994, EPA and the U.S. Navy will provide training on the machine and support in designing a halon management plan for the country.

MEXICO

EPA will be meeting with all of the 43 major suppliers and distributors of CFCs and TCA in Mexico, and with numerous companies, in an effort to develop projects designed to eliminate the use of ODS solvents. As noted during the last progress report, we have discovered that initial project preparation work that is designed to identify alternative technologies often results in the identification of cost effective steps that the company can take on its own to eliminate its use of ODS. This is especially true when one takes into account that the price of CFC 113 has more than tripled in Mexico and is forcing many users to phase out immediately. EPA traveled to Mexico City in June to discuss ongoing and future work with that country, and EPA is looking forward to working with Mexico's Instituto Nacional de Ecología (INE) and UNDP on the Global MACs Project in Mexico, the bilateral component of which is being submitted for approval to this meeting. Additionally, INE and EPA have discovered that cost effective steps can be taken to reduce emissions from commercial

refrigeration, and we look forward to working with Mexico to develop a sectoral strategy and specify projects to address this critical area. This will include working with end users, such as supermarket chains, to develop specific project proposals. Current estimates indicate that approximately 2,645 MT (ODP weighted) are consumed in the end-user subsector of commercial refrigeration each year in Mexico. INE and EPA believe working in this subsector can produce large reductions in ODS use.

PANAMA

EPA has been providing technical assistance to the government of Panama in the halons sector. This assistance helped to support the development of legislation by the Panamanian government to restrict halon 1211 imports and use. It also resulted in work on the development of a strategy and project that is designed to virtually eliminate the use of halon 1211 within Panama.

URUGUAY

EPA has also been providing technical assistance to the government of Uruguay in the halon sector. Specifically, we cooperated with the Government of Uruguay in the development of materials for a December 1993 workshop. Under the Global Halons Project, UNDP delivered one halon 1211 recovery/recharge machine and air compressor to Uruguay. EPA supported subsequent activities undertaken by the Government of Uruguay including the development of a halon management plan.

VENEZUELA

In November 1993, EPA, in conjunction with the Government of Venezuela, completed a halons assessment. It also participated in a halon recycling/banking workshop. In December 1993, EPA worked with UNDP to deliver one halon 1211 recovery/recharge unit and air compressor to the country. Finally, in April 1994, EPA participated in a UNDP-sponsored workshop on halons for Latin America and the Caribbean in Venezuela.

Activities Underway or Completed during the reporting Period

as at May 1994

Country Sector	Project title/ Project type	ODS to be phased-out	Date of approval	Approved funding	Funds disbursed	Time frame	Status of implementation
CHINA							
Halon	Halon management resource manual <i>Technical assistance</i>	-	Nov 1993	\$32,000	\$32,000	1993	Completed. Manual furnished to UNEP (Dec 1993)
Halon	Halon 1211 recovery/recharge training workshops <i>Training</i>	-	Nov 1993	\$271,000	\$271,000	1993	Completed. Three workshops held (Beijing, Apr 1993, Hangzhou and Guangzhou, Sep 1993). 3 recovery/recharge machines provided. Coordinated delivery and deployment of 20 UNDP provided machines. Assessment of halon use in Guangdong province initiated
Halon	Halon-1211 recovery/recharge machines and training <i>Investment</i>	200	Mar 1994	\$735,000	\$705,000	1 year (1994)	39 machines delivered (May 1994). Workshop for machine operators planned for Nanjing (Sep 1994)
Refrigeration	Staged project to produce CFC-free refrigerators in China (stage 1a: model prototype development and testing) <i>Technical assistance</i>	-	Jun 1993	\$396,110	\$300,000	6 months (1993)	Initial prototype testing nearly completed. Selection of final design to be made shortly. Next phase of project to be proposed to the 14th ExCom Meeting
ECUADOR							
Several	Assistance in implementation of country programme <i>Country programme prepara</i>	-	Nov 1993	\$11,000	\$11,000	1 year	Completed
MALAYSIA							
Solvent	Conference on the elimination of ozone depleting solvents <i>Training</i>	-	Nov 1993	\$24,000		1993	Conference held (Apr 1993). Final report prepared
MEXICO							
Refrigeration	Chiller hands-on training <i>Training</i>	-	Oct 1992	\$81,000	\$81,000	Jan 1992-Aug 1992	Completed. Two workshops for 200 technicians conducted
Several	Support for country programme preparation and development of project proposals <i>Project preparation</i>	-	Jun 1992	\$145,000	\$145,000	1991-1992	Developed project proposals in the aerosol, MAC and solvent sectors. Supported preparation of CPG
Several	Institutional strengthening <i>Institutional strengthening</i>	-	Jun 1992	\$285,000	\$285,000	1992-1994	Ongoing. The Ozone Protection Unit has prepared and submitted to the World Bank 12 projects totalling \$2.98 million which will result in an annual reduction of 2,719 ODS tonnes

N/A Not available

- Not applicable

Activities Underway or Completed during the reporting Period

as at May 1994

Country Sector	Project title/ Project type	ODS to be phased-out	Date of approval	Approved funding	Funds disbursed	Time frame	Status of implementation
THAILAND							
Solvent	Follow-up activities of the USA/Thailand/Japan conference on conservation, containment and alternatives <i>Technical assistance</i>	-	Oct 1992	\$203,000	\$108,000	1992-1994	Project proposal for Thai Airways is being prepared with assistance from Swedish EPA. Follow-up conference held (Feb 1994)
VENEZUELA							
Refrigeration	Technical assistance and demonstration project in CPC recycling in MAC <i>Demonstration</i>	-	Oct 1992	\$115,000	\$115,000	Oct 1992-Sep 1993	Training workshop held in Caracas (May 1994). 18 MAC recycling machines distributed. Data is being collected on the operation of the machines and a report will be submitted in Jan 1995
REGION: LAC							
Halon	Follow-up to regional halon-1211 workshop <i>Demonstration</i>	-	Oct 1992	\$80,000	\$80,000	Aug 1992-Sep 1993	Completed. Strategy to assess use of halon and deploy halon recovery/recycling machines. Assessment missions to Panama, Uruguay completed
GLOBAL							
Halon	Regional workshops in halon-1211 training <i>Training</i>	-	Oct 1992	\$429,000	\$429,000	Aug 1992-Aug 1993	Completed. One workshop held (Beaufort, USA. Sep 1992). China halon workshop supported

N/A Not available

- Not applicable



CAISSE FRANÇAISE DE DEVELOPPEMENT

ÉTABLISSEMENT PUBLIC
DOTATION 2,5 MILLIARDS de FRANCS

PARIS, le

- 9 JUIN 1994

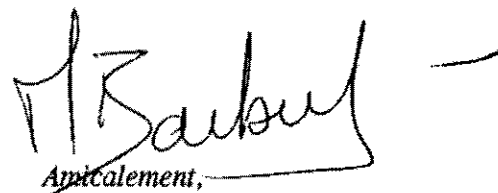
Monsieur Omar E. EL-ARINI
Chef du secrétariat
FONDS MULTILATERAL
1800 McGill Collège, 27ème étage
Montréal, Québec
CANADA H3A 3J6

N.REF : DPE/FFEM-MB/DSP N°

5232

Cher Omar,

Je vous prie de trouver ci-joint le descriptif du programme pays Mauritanie que je vous propose de soumettre à l'approbation du prochain Comité exécutif du protocole de Montréal.



Amicalement,

Responsable du Secrétariat
du F.F.E.M.

P.J. 1

N.B. Je vous prie de bien vouloir noter mes nouvelles coordonnées : ☎ : (1) 40.06.34.12, n° de fax (1) 40.06.32.48

DESCRIPTIF

➤ **TITRE DU PROJET** : Aide à la formulation d'un Programme de pays

➤ **PAYS VISE PAR L'ARTICLE 5** : Mauritanie

➤ **DESCRIPTION DU PROJET**:

- ⇨ Fournir une aide technique, logistique et administrative au Gouvernement de la Mauritanie pour la formulation du Programme de pays,
- ⇨ Aider à la finalisation du Programme de pays afin que le Gouvernement de la Mauritanie puisse le soumettre au plus tôt au Comité Exécutif du Fonds Multilatéral aux fins d'application du Protocole de Montréal.

➤ **MONTANT** : 44.000 \$

➤ **ECHEANCE** : Juillet 1994 - Septembre 1994

MINISTRY OF THE ENVIRONMENT
INTERNATIONAL ENVIRONMENT & POLICY DEPARTMENT



IEPD 9.3

29 June 94

DID : 7319014
FAX : 7384468

Mr Andrew R Reed
Programme Officer
Multilateral Fund Secretariat
For The Implementation of the Montreal Protocol
1800 McGill College Ave, 27th Floor, Montreal, Quebec, Canada H3A 3J6
(Fax: (514) 282-0068)

Dear Mr Reed

MULTILATERAL FUND
- OFFSETTING OF BILATERAL CONTRIBUTIONS FOR PROJECTS

We refer to your letter dated 31 May 94.

2. We have included additional details on our proposed project "Training Workshop on CFC-113 and Methyl Chloroform (MCF) substitute and Alternative Technologies" in the attached revised description of the project at Annex 1.
3. In response to your query on the relationship between the approved and proposed workshop, the proposed workshop will focus on training in quality control and evaluation methods for the use of CFC-113 and MCF substitutes. However, the already approved project "Regional seminar on Methyl Chloroform elimination" will focus on the dissemination of information concerning the adaptation of technologies for MCF elimination to local circumstances for the ASEAN countries. This is explained in Para 2 of Annex 1.
4. As requested, a progress report on the approved project "Regional Seminar on Methyl Chloroform elimination" is at Annex 2.
5. Please let us know if you need any further information.

Thank you.

Yours sincerely

BIN CHEE KWAN

for HEAD

INTERNATIONAL ENVIRONMENT AND POLICY DEPARTMENT

MINISTRY OF THE ENVIRONMENT

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

13 June, 1994

Dr. Omar El-Arini
Chief Officer
Multilateral Fund for the
Implementation of the Montreal Protocol

OFFICE OF
AIR AND RADIATION

Dear Dr. El-Arini,

Attached please find a request for Executive Committee approval of funding for new bilateral activities, and an update of the status of on-going bilateral projects that were previously approved by the Executive Committee.

With regard to our new funding request, in total, the United States is asking for an offset of \$1,629,000 against our 1994 contribution for new bilateral activities. All of the requests for approval of new funding relate to additional resources which will be used to meet agreed incremental costs on projects that strictly relate to compliance with the provisions of the Protocol. The total funding level that has been requested for approval is well below the 20% threshold for bilateral activities that was approved by the Parties. All of the Article 5 Parties that we are individually collaborating with have given approval for project related expenses to be counted as part of the US contribution to the Fund. In a number of cases we are requesting funds in the form of project preparation assistance. It is our intent to work with relevant countries and individual implementing agencies (as agreed with those countries) in the implementation of related projects.

We appreciate the opportunity to provide an update on the status of our bilateral activities, and we look forward to review and approval of our new bilateral activities at the 13th Meeting of the Executive Committee. If you have any questions regarding any of the matters included in this submission, please feel free to have your staff call Gary McNeil, Chief of our Technology Transfer Branch.

Sincerely,

A handwritten signature in dark ink, appearing to read "P. S. Horwitz", is written over the word "Sincerely,".

Paul S. Horwitz
International Advisor
Stratospheric Protection Division



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NEW FUNDING REQUESTS FOR BILATERAL ASSISTANCE

Overview of New Funding Requests

Argentina

- Project Preparation \$105,000

China

- Project Preparation (Halons) \$200,000

Ecuador

- Technical Assistance (Halons) \$58,000

Mexico

- Workshop (Chillers) \$9,000
- Sectoral Study/Project Preparation (Refrigeration) \$410,000
- Demonstration Project (MACS) \$120,000
- Project Preparation (Solvents) \$450,000

Panama

- Project Preparation (Halons) \$120,000

Uruguay

- Technical Assistance (Halons) \$8,000

Venezuela

- Demonstration Project (MACS) \$53,000
- Technical Assistance (Halons) \$31,000

Regional

- Low Consuming Country Refrigerant Strategy Development \$65,000

 \$1,629,000

PROJECT OUTLINE

COUNTRY:	ARGENTINA
PROJECT TITLE:	Project Preparation/Technical Assistance
SECTOR COVERED:	Foams
INCREMENTAL COST:	US\$105,000
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	Secretaria de Recursos Naturales y Ambiente Humano

Description:

Initial work in identifying ODS-using companies, assisting in the selection of appropriate alternative technologies, and preparing investment project application documents for submission by the government to an implementing agency. This work was initiated with the aim of preparing project applications for submission to the Executive Committee simultaneously with the country program. EPA has found a high level of interest among Argentine manufacturers to rapidly phase out their use of ozone-depleting chemicals.

PROJECT OUTLINE

COUNTRY:	CHINA
PROJECT TITLE:	Project Preparation (Halons)
SECTOR COVERED:	Halon 1211 and 1301
SECTOR ODS CONSUMPTION:	4,000 MT halon 1211 and 50 MT halon 1301 (est., 1991)
INCREMENTAL COST:	US\$200,000
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	National Environmental Protection Agency and Ministry of Public Security
DURATION:	1994 through June 1995

Description:

At a series of meeting in April 1994, EPA and MPS discussed the progress of ongoing cooperative halon activities, specifically the placement and use of the halon 1211 recovery/recharge machines, and further halon phaseout activities in China. It was agreed that the two sides would pursue further discussion of some proposed activities in this sector.

The following are some of the activities that EPA will further develop with MPS:

- continuing work with MPS to focus on Guangdong province and the information previously collected to identify and develop proposals for activities to reduce halon demand, production, unnecessary emissions, and consumption, and to provide further information about available alternatives
- providing support to MPS, based on US Navy and EPA experience in working with other countries implementing the Montreal Protocol, to help develop a sector strategy for phaseout
- working with MPS to develop project proposals for further halon emissions reductions including consideration of proposals for specialized applications such as shipboard, offshore oil platform, computer rooms, and for factory conversion projects to reduce significant loss of halon through leakage.

Discussion:

Total halon consumption in China for 1991 is estimated to be 4,000 MT of halon 1211 and 50 MT of halon 1301. This is 26.5 % of Chinese ODP-weighted consumption of ODS.

In March 1993, the National Environmental Protection Agency submitted China's Country Programme. According to the Country Programme, consumption of halon 1211 in 1991 was 4,000 metric tons (MT): 3,500 MT from domestic halon production and 500 MT from imports. Domestic production met 88 percent of China's overall need for halon 1211, and, in the absence of controls, production is expected to increase to meet future consumption. The country program predicts exceedingly rapid growth in this sector. Demand for halon 1211 extinguishers is expected to grow by 11 % per year before 1997 and then by 7 % per year thereafter. In 1991, halon 1301 consumption was 50 MT. The demand for halon 1301 systems is expected to grow by 20 % per year before 1997 and by 15 % per year thereafter.

Halon 1211 is used for filling new portable fire extinguishers and for fixed units. It is also used to refill extinguishers after servicing or after the extinguishers have been used in firefighting. In 1990, an estimated 2,645 MT of halon 1211 was used for filling new fire extinguishers, 355 MT for filling new fixed systems, and 1,000 MT for servicing/refilling extinguishers. Significant halon emissions are of concern during the halon chemical production and extinguisher manufacturing processes, and during servicing and maintenance of the fire extinguishers.

Follow-on activities: Projects proposals developed through this activity will be submitted to the EC.

PROJECT OUTLINE

COUNTRY:	ECUADOR
PROJECT TITLE:	Halon 1211 Management
SECTOR COVERED:	Halon 1211
SECTOR ODS CONSUMPTION:	21 ODP-weighted MT (est.)
INCREMENTAL COST:	US\$58,000
PROJECT IMPACT:	7.5 MT/Annually
COST-EFFECTIVENESS:	\$7.73/KG
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	Ministry of Industry, Environmental Protection Unit
DURATION:	1994

Description:

The halon management program in Ecuador is being sponsored by the Ministry of Industry and members of the Ecuadorean fire protection industry, UNDP, EPA, and the U.S. Navy. The program includes the development of a halon assessment and the shipment of one EPA-procured halon 1211 recovery/recharge unit to the country.

In June 1994, EPA, in conjunction with the U.S. Navy, will be providing training on the machine. We will also provide technical support to the Government of Ecuador to develop a halon management plan which will describe how to most effectively use the machine, to determine standards, to define critical uses, and to develop a bank for halon 1211.

Follow-on activities: No follow-on activities are anticipated.

PROJECT OUTLINE

COUNTRY:	MEXICO
PROJECT TITLE	Cancun Chiller Workshop
SECTOR COVERED:	Building Chillers
SECTOR ODS CONSUMPTION:	4,796 MT (Refrigeration)
PROJECT IMPACT:	Trained Regional IMSS Technicians and others to reduce emissions of ODS during operation and maintenance of chillers
INCREMENTAL COST:	US\$9,000
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	Instituto Nacional de Ecología, México (INE)
DURATION:	1994

Description:

This workshop was the last of five that EPA and INE conducted in each regional headquarters city of the Instituto Mexicano de Seguro Social (IMSS), the Mexican national health system. Technicians from local chiller service companies also attended the workshop. The workshop (October 25-29, 1993) trained chiller servicing technicians in improved servicing and maintenance techniques to reduce CFC emissions during the operation and servicing of chillers. Approximately 200 people attended the workshop in Cancun. EPA provided 200 chiller workshop manuals, presentation materials, and a Mexican expert to conduct the training.

The workshops were targeted at IMSS because it owns and operates, in hospitals, labs, and clinics, over 50 % of the chillers in Mexico. Emissions of CFCs from chillers in Mexico due to improper servicing, venting and leaks are estimated to be 22 tons annually. By improving chiller maintenance and servicing, EPA estimates that these workshops can reduce at least half of those emissions. INE and EPA believe IMSS has the technical and administrative capacity to successfully phase out ODS in its chillers. IMSS intends to apply for Multilateral funds to finance this transition.

PROJECT OUTLINE

COUNTRY:	MEXICO
PROJECT TITLE:	Sectoral Study/Project Preparation (Refrigeration)
SECTOR COVERED:	Commercial Refrigeration, Chillers
SECTOR ODS CONSUMPTION:	4796 (Total refrigeration sector)
INCREMENTAL COST:	US\$410,000
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	INE
DURATION:	1994

Descriptions:Pilot Sectoral Study and Action Plan

US EPA believes that commercial refrigeration end-uses (i.e. installed systems, not manufacturers of new equipment) in Mexico offers an important opportunity to achieve substantial and exceptionally cost-effective ODS reductions. Current consumption in this sector is estimated to be 2,645 metric tons.

As part of our current efforts, we have identified three large users (national grocery store chains) with the potential to reduce up to 700 tons annually. We believe that substantial reductions can be accomplished at an incremental investment project cost of less than \$2/kg. The opportunity for unusually cost-effective reductions in this sector in Mexico is a function of both current maintenance practices and the effectiveness of refrigerant conservation measures. In the US, refrigerant conservation has reduced users' annual refrigerant consumption by 28 - 44 %. In Mexico, the opportunities for reduction are much greater, because current maintenance practices there result in the loss of 100 - 200 % of the refrigerant charge annually, much more than is used in the US in the absence of refrigerant conservation measures.

INE and EPA believe that a study and pilot action plan that includes a group of initial

projects is the first step toward eliminating CFC use in the commercial refrigeration sector in Mexico in the most cost effective manner possible. The study would produce information more detailed and up-to-date than the information in the country program (which was prepared in 1991). It will include basic information about the use of ODS refrigerants to maintain commercial refrigeration equipment in Mexico country-wide, as well as information on industries and cities/regions of significant use. Based on the study, EPA will prepare a pilot action plan, focusing on activities to be initiated in the next 9 - 12 months, which will identify investment projects and other activities to achieve cost effective phase-out at the targeted enterprises. The plan will schedule the identified activities in the sub-sector to maximize cost-effectiveness.

After the proposed activity is underway, it is expected that a similar action plan would be proposed for part or all of the remainder of the sector, based on the experience gained during preparation and implementation of the pilot plan.

Project Preparation

Identify and contact companies which operate commercial refrigeration or chiller equipment. Evaluate each company's equipment, and recommend cost-effective steps to reduce and eventually eliminate the use of ODS refrigerants. Prepare project documentation for submission by each company and INE to an implementing agency. Also prepare proposals for activities, other than investment projects, which may be identified in the pilot action plan.

PROJECT OUTLINE

COUNTRY:	MEXICO
PROJECT TITLE:	Demonstration Project (MACS)
SECTOR COVERED:	Refrigeration (MACs)
SECTOR ODS CONSUMPTION:	780 tons (est., 1991)
PROJECT IMPACT:	25 MT annual reduction in CFC-12 emissions
INCREMENTAL COST:	US\$120,000 (U.S. bilateral, plus UNDP Global MACs project funding, primarily for equipment)
COST-EFFECTIVENESS:	\$8.00/kg ¹
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	INE
DURATION:	1994/1995

Description:

US EPA proposes to design and implement an initial activity to reduce the use of CFC-12 in MACs servicing in Mexico. This activity, to be completed over approximately the next 12 months, would include:

- collection and analysis of basic information about the MACs sector
- a demonstration MACs recycling workshop for approximately 20 repair shops in a single city
- furnishing recycling machines and related equipment to participating repair

¹ Cost-effectiveness is calculated based on an estimated \$80,000 of assistance under the Global MACs Project. EPA has not yet proposed to UNDP a budget for the Global MACs component.

shops (to be funded by the UNDP Global MACs project)

- followup data collection and preparation of a report to document the experience of the repair shops with MACs recycling
- reduction of approximately 25 tons of CFC-12 emissions annually

This activity will be designed to complement the Monterrey MACs demonstration being conducted under the World Bank \$180,000 line of grant.

The proposed project would be supported by US bilateral assistance to Mexico and the UNDP Global MACs project.

Discussion:

INE and USEPA believe that MACs recycling represents an important opportunity to cost-effectively reduce CFC-12 emissions in Mexico, while at the same time reducing the impact of the CFC phase-out on Mexican automobile owners. In 1991, a reported 780 tons were used annually in this sector, according to the country program. However, based on our experience in Venezuela, we believe actual use could be two or three times greater, or more, in Mexico.

INE and EPA also believe that it is urgent to begin MACs recycling work in Mexico as soon as possible because of the size of the sector, emerging issues in the sector, and Mexico's accelerated phase-out schedule. Moreover, we believe that the rapidly growing use of HFC-134a as well as "drop-in" replacements for CFC-12 present urgent issues that should be addressed as rapidly as possible, including safety, leak detection, and risks of cross-contamination.

MACs recycling can present challenging implementation issues. For example, incremental costs of possible investment projects are highly sensitive to local factors including wage rates of MACs mechanics, CFC-12 prices, and MACs repair practices. By measuring CFC use before and after the implementation of recycling, and closely monitoring the effect of recycling on mechanic productivity, we will gather data that will be useful in designing and implementing a comprehensive national program, as part of a subsequent project. Our report will also provide information that may be useful to the Executive Committee in evaluating future MACs investment project proposals.

The project will draw on EPA's experience in implementing the Venezuela project with FONDOIN and UNDP (the workshop was held in Caracas May 26 and 27, 1994; see attached project description). We will strive, where possible, to use the materials developed for Venezuela, taking into account that equipment and training needs vary from country to country. EPA's experience gained in Venezuela will help us to prepare the Mexico

workshop more quickly and efficiently. Similarly, we have learned much that will be useful in identifying, screening, and contracting with appropriate Spanish-speaking instructors. Also, our work in developing appropriate equipment specifications will be very useful in Mexico, although needs may be different there.

Preparation for the Caracas workshop has already catalyzed further activities that will reduce CFC-12 emissions. This project will achieve similar gains in Mexico as soon as possible. For example, we have learned that MACs recycling units are not widely marketed at this time in Venezuela, and our work has prompted manufacturers of recycling equipment to further investigate distributing MACs recycling units there. Also, our work has interested a local technical training institute in adding MACs recycling to its training program for automotive mechanics. Moreover, the institute has also provided its classroom and shop facilities for our use during the May workshop, and is sending instructors to the workshop, as well.

Follow-on activities: After this project is underway, we expect to submit a new proposal for development of a comprehensive national action plan for the sector in Mexico. That follow-on proposal will draw heavily on the lessons learned during the demonstration project. For example, the scope of a comprehensive action plan will depend on the structure of the MACs servicing industry, current maintenance practices (including recycling), etc.

PROJECT OUTLINE

COUNTRY:	MEXICO
PROJECT TITLE:	Project Preparation
SECTOR COVERED:	Solvents
SECTOR ODS CONSUMPTION:	1336 MT
INCREMENTAL COST:	US\$450,000
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	INE
DURATION:	1994

Description:

Identify Mexican-owned ODS-solvent-using companies, assist in the selection of appropriate alternative technologies, perform pre-investment incremental cost assessments, prepare investment project application documents for eligible projects for submission by INE to an implementing agency. Initial project preparation work to select alternative technologies often identifies cost-effective steps the company can take on its own to eliminate its use of ODS. As the price of ODS solvents increases, this occurs more frequently.

Usage of ODS solvents has declined approximately 80% (on an ODP-weighted basis) in Mexico, from 1991 levels, primarily as a consequence of the 300% increase in CFC-113 prices. This project is aimed at further reducing solvent use, and is targeted at remaining CFC-113 users and TCA users, particularly cost-effective projects in fast-growing industries and where alternatives cannot be easily identified.

PROJECT OUTLINE

COUNTRY:	PANAMA
PROJECT TITLE:	Project Preparation/Technical Assistance (Halons)
SECTOR COVERED:	Halon 1211
SECTOR ODS CONSUMPTION:	23 MT (ODP-weighted)
INCREMENTAL COST:	US\$120,000
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	Ministry of Health, Government Commission on Ozone
DURATION:	1994

Description:

The US has been providing technical support to the government of Panama in the halons sector. This support helped in the development of new controls on the import and use of halon 1211. Specifically, the Government of Panama has imposed several regulations restricting the use of halon 1211 in the country:

- ban on halon 1211 imports beginning December 31, 1993;
- ban on halon 1211 imports for recharging purposes beginning December 31, 1994;
- prohibition on the use of halon 1211 in fire protection training and demonstration; and
- requirement to report all emissions, improve methods of detection, install/use flame-resistant cables and cabinets to reduce fires in computer rooms

The US has also been working with Panama and UNDP in the development of a strategy and project designed to virtually eliminate the use of halon 1211 in Panama. This project, which is tailored to the specific circumstances of Panama, is currently under review by the Government of Panama. Upon approval by the government, it is expected that the project will be implemented jointly by the US and UNDP under the auspices of the Global Halons Project.

PROJECT OUTLINE

COUNTRY:	URUGUAY
PROJECT:	Halon 1211 Management/Technical Assistance
SECTORS COVERED:	Halon 1211
SECTOR ODS CONSUMPTION:	Stock of 10 MT and 1.1 MT of imports/year
INCREMENTAL COST:	US\$8,000
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	National Environmental Agency, Ministry of Housing, Land Use Management and Environmental Protection, Government Commission on Ozone
DURATION:	October 1993-September 1994

Description:

The halon management program in Uruguay was sponsored by the U.S. Environmental Protection Agency (EPA), Uruguay's Government Commission on Ozone (COGO), the Dirección de Bomberos and Uruguayan fire equipment distributors, UNDP, EPA, and the U.S. Navy. During 1993/1994, EPA prepared materials for a December 1993 workshop sponsored by COGO, and worked with UNDP to deliver one halon 1211 recovery/recharge unit to the Dirección de Bomberos.

The Uruguayan government has developed a halon management plan which includes proposed legislation, a public awareness campaign, assistance to users in reducing leaks, use of halon 1211 recovery/recharge equipment, and the adoption of a small extinguisher exchange program.

Follow-on activities: No future activities are scheduled. However, EPA, UNDP and the Government of Uruguay are discussing implementation of the program.

PROJECT OUTLINE

COUNTRY:	VENEZUELA
PROJECT TITLE:	Demonstration Project (MACS)
SECTOR COVERED:	Refrigeration (MACS)
SECTOR ODS CONSUMPTION:	400 - 1600 MT/year
PROJECT IMPACT:	25 MT/year
INCREMENTAL COST:	US\$53,000
COST-EFFECTIVENESS:	\$9.92/KG ¹
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	FONDOIN
DURATION:	1994

Description:

This proposal is for a carry-on of a project that was submitted for approval in 1992 and is now over 80 % complete (the initial steps of the project have been highly successful; the amount requested here is to complete the project). A two-day workshop was held in Caracas May 26-27, 1994 for over 40 technicians as well as government representatives from Ecuador and Colombia.

EPA decided that it would be beneficial to enhance the monitoring and evaluation components of the project. The amount requested here includes funding of an intensive evaluation on the effectiveness of the training, and detailed monitoring of the operation of the recycling equipment, including data collection. At the completion of the six-month demonstration period, a report will be prepared on the project and furnished to the Secretariat and the Implementing Agencies. Additional support has been provided by UNDP to purchase equipment and to fund certain workshop expenses under the Global MACs Project.

¹ Cost-effectiveness is calculated based on an estimated \$80,000 in Global MACS Project funding. Actual spending is likely to be less.

18 recycling machines are now being used by the technicians who attended the workshop. The technicians are collecting data on the operation of the machines, which will be collected by FONDOIN monthly.

This is the first such project conducted in an Article 5 country, to our knowledge. The project design, machine specifications, curriculum, workshop materials, and other work completed for this project will be useful in subsequent similar activities to be conducted with UNDP under the Global MACS Project. Consequently, subsequent activities are expected to be less costly.

PROJECT OUTLINE

COUNTRY:	VENEZUELA
PROJECT TITLE:	Technical Assistance (Halons)
SECTOR COVERED:	Halon 1211
SECTOR ODS CONSUMPTION:	Stock of 150 ODP-weighted MT and 6 MT of imports/year (1993)
INCREMENTAL COST:	US\$31,000
PROJECT IMPACT:	1.5 MT Annually
COST-EFFECTIVENESS:	\$20.67/KG
BILATERAL AGENCY:	USEPA
NATIONAL COORDINATING AGENCY:	FONDOIN

Description:

The halon 1211 management program in Venezuela has been sponsored by the Venezuelan Fund for Industrial Reconversion and Technology (FONDOIN) and Venezuelan fire equipment distributors, UNDP, EPA, and the U.S. Navy (Navy). To date, the program has involved the development of a halons assessment and initial halon 1211 management plan, the delivery of one UNDP-procured halon 1211 recovery/recharge unit, and participation at two UNDP-sponsored workshops, one focused on halon recycling/banking in November 1993 and another regional workshop in April 1994 targeted at countries in Latin America and the Caribbean. EPA is coordinating its activities with Environment Canada which is working with Venezuela on a program to manage halon 1301.

Follow-on activities: EPA is discussing future halon work in Venezuela which will be the subject of a future request. It is likely that the next phase of the program will include work with the Venezuelan Armed Forces to manage their use of halon 1211 for military applications. Under an interagency agreement with EPA, the U.S. Navy can assist the Venezuelan military with their phaseout of ozone-depleting chemicals such as halon. Further cooperation may include the shipment of additional halon 1211 units to the military and perhaps to other commercial sites in the country.

PROJECT OUTLINE

COUNTRY:	Regional - Low Consuming Countries/Caribbean and Latin America
PROJECT TITLE:	Project Preparation
SECTOR COVERED:	Refrigeration
PROJECT DURATION:	1 year
INCREMENTAL COST:	US\$65,000
BILATERAL AGENCY:	USEPA

Description:

USEPA is collaborating with UNIDO in the development of a manual for use by low-consuming developing countries in their effort to reduce and eliminate reliance on ozone depleting refrigerants. EPA and UNIDO are both providing expertise in the development and field-testing of the manual, which will include a catalog of cost-effective interventions including the factors that must be present to make that intervention successful. It will also include an questionnaire designed to allow the country to determine if those success factors are present, and guidance for ozone protection officials to use in completing the questionnaires and selecting and implementing cost-effective interventions.

Using the manual, it is expected that a developing country can independently develop, or more effectively develop in collaboration with an implementing agency, a country action plan that meets its specific identified needs. After EPA/UNIDO development of an initial draft of the manual, EPA field testing to fine-tune the materials will take place in one or two countries in the Latin America and Caribbean region. UNIDO field testing will take place elsewhere. After completion of this project, EPA will propose bilateral assistance to work with one or two Article 5 countries in preparing action plans and project proposals using the manual.