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

Seventh Meeting
Montreal, 23-26 June 1992

WORLD BANK
PROGRESS REPORT ON BANK-IMPLEMENTED MONTREAL PROTOCOL OPERATIONS

(As of May 22, 1992)

INTERIM MULTILATERAL FUND
Under The
MONTREAL PROTOCOL

PROGRESS REPORT ON BANK-IMPLEMENTED MONTREAL PROTOCOL OPERATIONS

(As of May 22, 1992)

GEF Coordinators Office, Environment Department

THE WORLD BANK

I. OPERATIONAL AND POLICY ISSUES

A. Major Developments, March through Mid-May, 1992

1. The Bank is proposing to adopt new generic project designs and streamlined procedures to expedite implementation of MP projects. To be fully effective, these will require a corresponding streamlining of MP EC project approval procedures.

a. **Streamlined Procedures for Small Projects:** As the majority of Montreal Protocol projects are below $1.5 million and are pilot or demonstration in nature, laying the foundation for larger MP investment operations, the Bank intends to use Project Preparation Advances (PPA) for such activities. Under the MP PPA, projects with the above-mentioned characteristics up to $1.5 million would be agreed on the basis of an exchange of letters with the EC-approved project document attached;

b. **Sectoral and Country Phase-Out Projects:** Two new generic project designs are proposed to facilitate the expeditious transfer of MP resources to beneficiary countries. Both would finance a large number of small sub-components in the framework of either an agreed country program or a sectoral phase out program in a particular region.

i. **Country Phase-Out Projects** would normally finance a time-slice of perhaps 2 years of the activities identified in a country program. Activity would be sustained until phase-out was effectively accomplished by additional operations in sequence based on updates of CPs.

ii. **Sectoral Phase-Out Projects** would provide resources for, say, all solvent, or foams, or Halons, projects in a particular region or sub-region, assembling a team of experts familiar with the region and technology to undertake repeater operations country by country from the EC agreed sectoral project's resources.

Where required, conventional single major investment operations would also be undertaken (eg. the Venezuela foam production conversion project).

A paper on proposed Bank MP Project Operational modalities describing more fully these new efficient administrative vehicles for supporting Interim Fund financed activities in the developing countries is being circulated to the EC with this progress report.

c. **Proposed Streamlining of MP Executive Procedures for approval of sub-projects greater than $500,000:** In order to make the Bank's proposed streamlined MP project design and procedures effective they need to be accompanied by rapid "out-of-session" , or between meeting, EC project approval procedures for sub-projects greater than $500,000. In discussion with the Chief Officer it appears that it is prerogative of the EC to establish such approval procedures. If the EC were able to agree to such procedures, delays would be avoided in project implementation caused solely by approving sub-projects at EC meetings 3-4 times per year.

2. The Bank was represented by the GEF Coordinator at Open-Ended Working Group of Parties to the Montreal Protocol which met in Geneva April 6-14, 1992. While criticisms were made of Bank procedures by the Venezuelan, Brazilian and Mexican delegations, the USA delegation indicated that it felt the Bank was making an effort to adapt its procedures to expedite its assistance to the developing countries to implement the Protocol. Discussions were held individually with assembled delegates on project processing and implementation arrangements in their respective countries and with MP Executive Committee members and the Chief Officer on progress and collaboration in fulfilling the Bank's role in MP implementation. Arising from the meeting, the Bank was asked to provide experts to contribute to discussions on the implications of a possible recommendation to the Parties to add **Methyl Bromide** to the list of controlled substances under the Protocol (see para. 4).

3. First OORG Meeting, Tuesday, April 21, 1992. The first meeting of the Ozone Operations Resource Group (OORG) was held in Washington on April 21, 1992. The OORG has been assembled by the Bank to provide specialized sector-based technical advice and assistance in fulfilling its role in financing the incremental costs of ODS phase out. The OORG is comprised of the following initial core group of six internationally-recognized sector-based experts: (1) Geno Nardini, Aerosols and Sterilants; (2) Simon Oulouhojian, Mobile Air Conditioning Systems (MACS); (3) Lambert Kuijpers, Refrigeration and Chillers; (4) Mike Jeffs, Foams; (5) Art Fitzgerald, Solvents; and (6) Hans Lagerhorn, Halons. The Bank's MP task managers and technical advisors also participated. Observers included representatives from the USEPA, Friends of the Earth, and the MP Secretariat. Proposed CY92 Bank projects were reviewed by the OORG at the regional and sectoral levels. The morning session was primarily for the purpose of familiarizing the OORG advisors with on-going project planning, by region and country, and the afternoon session focussed upon the major sectoral technical issues being addressed in the present project portfolio.

Principal outcomes included:

a. OORG members agreed to compile a roster of peer sector experts to assist them with project technical review, project design activities, and where appropriate in specialist working groups on technical issues needing resolution to facilitate Bank MP operations;

b. Confirmation that a written signed OORG member or peer roster member opinion will be provided on each Bank project submitted for MP EC approval. All OORG members will receive all technical opinions issued and these will be lodged with the Secretariat and included on the Bank's project. This technical review procedure now substitutes for the previous technical review panel arrangement;

c. OORG members will participate in at least one Bank preparation or appraisal mission in the next 12 months to familiarize them with Bank procedures and operating environments;

d. OORG will meet 3-4 times per year in the first two years at least, encompassing working groups as required on specific technical issues on which Bank operational standards are required to provide technically sound and uniform advice and assistance for ODS phase out;

e. Agreement that the next OORG meeting will be held in Washington, September 28th and October 2nd, 1992, before and after the International CFC and Halons Alternatives Conference, sponsored by the Alliance for Responsible CFC Policy, September 29 through October 1, 1992, with the second day of the meeting being a session with invited specialists on domestic refrigeration technical packages which can be recommended as standards for Bank IMFMP projects.

A copy of the minutes of the first OORG meeting are appended in Annex A.

4. The Environment Department of the Bank has prepared for Secretariat and Executive Committee review a position paper proposing a practical interpretation of incremental costs. The paper is being circulated with this progress report. The key elements of the interpretation would define incremental costs as:

a. including costs incurred by enterprises in implementing ODS phase-out activities, defining the extent to which savings and benefits should be deducted on a case-by-case basis;

b. embracing reasonable cost of capacity building in national administrations to enable Governments to organize and oversee the implementation of activities defined in agreed country programs for ODS phase out;

c. the share of technology development activities which were not compensated by benefits unrelated to the ODS phase-out;

d. not including retroactive financing of ODS phase out costs incurred voluntarily and unilaterally.

5. Subsequent to the Open-ended Working Group of the Parties meeting of April, 1992, the Bank will provide two agricultural specialists to address the costs to developing countries of a possible phase out of Methyl Bromide. Methyl Bromide is a chemical without easily applied readily available alternatives as a soil fumigant to protect horticultural and agricultural crops against soil nematodes and to preserve grain in storage from insect and other damage. The two specialists are Hamdy Eisa (protected crops) and Jitendra Srivastava (grain fumigation) from the Bank's Agriculture Technical and Natural Resources Division (AGRTN). They will attend meetings in Washington during June as part of a technical assessment of Methyl Bromide's ozone depleting potential and alternatives to its present commercial end-uses.

6. Following meetings with the Egypt MCMC IFC task team and Dr. El-Deeb, General Manager, MCMC, in Washington in March, 1992, and discussions with the OORG on domestic refrigerator ODS alternatives, a proposal on how to proceed with the proposed MCMC was presented to the Chairman MP EC and Mr. Saleh Hafez, Chairman of the Egyptian Environmental Affairs Agency. A decision on the Egypt proposal for conversion of the MISR Compressor Manufacturing Co. (MCMC) to HFC-134a was deferred at the request of the Egyptian head of delegation, Dr. Eid, pending resolution of issues related to licensing and shareholding agreements and an MCMC shareholder's stance on the project (the International Finance Corporation (IFC) of the World Bank). Relevant correspondence is appended (Annexes B and C).

7. Technical concerns on components of Bank MP investment operations in Mexico and China were raised by Friends of the Earth and the USEPA with respect to certain uses of HCFC-22 in Bank MP investment operations. These questions were referred to the Bank's Ozone Operations Resource Group (OORG) foam sector advisor, Mike Jeffs, whose technical opinion is appended (Annex D), and were reviewed with Bank ozone technical advisors internally . As a result the Mexican project will not finance the HCFC-22 alternative in foam production and the China project component for conversion from CFC-11 to HCFC-22 has been put in abeyance pending OORG reviews of refrigeration alternatives.

8. With the twentieth country ratifying the London amendments of the Protocol, it is assumed that India will soon ratify the Montreal Protocol. Accordingly, the Bank has approached the Government to offer

assistance in preparing the required country program and pre-investment studies.

9. A reconnaissance mission was launched in late May to discuss and reach agreement with Guatemalan authorities towards preparing a Country Program for Guatemala, and preparing investment projects for grant financing through the Interim Multilateral Fund.

10. GEF ODS Phase-Out Projects for Poland and Czechoslovakia are expected to be reviewed with the Scientific and Technical Advisory Panel and GEF Implementation Committee in September, 1992. Only countries that have ratified the Montreal Protocol are eligible for funding from either the Interim Multilateral Fund or the Global Environment Facility (GEF). However, only those countries which are Parties to the Montreal Protocol and have more than 0.3 Kg per capita ODS and less than $4000 per capita GDP are eligible for support through the GEF. Countries receiving funding through the GET must also prepare Country Programs using the Guidelines recently adopted by the MP Executive Committee. GEF documents describing the Poland (a joint effort of UNDP and USEPA) and Czechoslovakia projects are being distributed with this report.

B. Progress on Key Operational & Policy Issues Affecting Bank assistance with MP Implementation

11. The following issues with important operational implications are under review either at the Bank's own initiative or at the request of the Secretariat or Executive Committee.

a. In April, 1992, the Bank completed the first draft of revised Montreal Protocol operations procedures which have been streamlined substantially over standard Bank procedures to expedite the large number of relatively small MP investment operations anticipated. These procedures have been made available with this progress report to the EC for information. A schematic of the Bank's MP Investment Project Cycle is appended for information (Annex E);

b. Cost-effectiveness Indicators for ODS phase-out investments are under review by the Bank's Environment Department. A paper entitled "Benchmark Unit Abatement Costs", has been commissioned and is available in final draft for review by the EC at its June meeting. The paper responds to the need to determine the relative cost-effectiveness of technically similar ODS phase-out activities across the world and to define a least cost approach to ODS phase out within and between countries in the face of resource scarcity. The sub-sectors for which preliminary data has been assembled and a tabulation of these data is provided in Annex II of the paper.

c. The Bank has confirmed in writing to the MP Secretariat that the Bank is unable to extend loans from trust funds such as the Ozone Projects trust Fund established to receive funds from the Interim Fund as agreed by the MP EC;

d. The level and duration of compensation of developing countries required in the event that the Parties agree to phase out Methyl Bromide (see para. 1(d));

e. Determination of eligibility for funding of costs to strengthen the capacity of developing country administrations to administer policies and programs to meet their obligation under the Protocol. The Bank has prepared for MP EC review a brief position paper defining and defending the need for supporting such costs.

f. Adoption of between-meeting EC approval of sub-components of EC-approved Bank projects to expedite the transfer of resources to the developing countries from the Interim Find for eligible activities. Such procedures are key to expeditious implementation of the Montreal Protocol.

C. Investment Projects Submitted to the Executive Committee for review during June 23-25, 1992.

12. The following table indicates, as of mid-May, 1992, the schedule of MP investment project presentations to the Seventh Executive Committee meeting in June 1992.

Country	Name of Project	ODS Sub-Sectors Addressed	Amount (in $ US millions)
Brazil	MP ODS Elimination Project	Refrigeration	8.0
China	ODS Phase Out Project ($6 million advance approved at February EC meeting; this amount is for the remaining portion of the total $14.9 million package)	Refrigeration, aerosols, foams, halons	8.9
Jordan	Technical Assistance & Investment Project for Reduction of Consumption of ODS	Aerosols	1.5
Thailand	ODS Phase Out Investment Project	Refrigeration, solvents	11.0
Turkey	Protection of the Ozone Layer Through the Reduction of the Consumption of ODS	Refrigeration	7.5
Tunisia	Ozone Layer Protection through the Reduction of Consumption of ODS	Refrigeration, foams	2.0
Venezuela	MP ODS Elimination Project	Foams	1.3
Total			40.20

D. Montreal Protocol Events to the Six Months Horizon

13. MP meetings and other events of importance to Bank operations are provided below for a six month horizon:

Meeting/Event	Place and Date
Seventh Meeting of the Montreal Protocol Executive Committee	Montreal, June 24-26, 1992
Technical Review of Methyl Bromide Ozone Depletion Potential	Washington, June 4 - 5, 1992
Economic Value of Methyl Bromide Use	Washington, June 16 - 18, 1992
Open-ended Working Group of the Parties	Geneva, July 6 - 15, 1992
Second OORG Meeting	Washington, September 28, 1992
International CFC and Halon Alternatives Conference	Washington, Sept. 29 - Oct. 1, 1992
OORG Refrigeration Working Group Meeting	Washington, October 2, 1992
Eighth Meeting of the Montreal Protocol Executive Committee	Montreal, October 1992
Open-ended Working Group of the Parties	Copenhagen, November 1992
Fourth Meeting of the Parties to the Montreal Protocol	Copenhagen, November 23-25, 1992

II. STATUS OF WORLD BANK MONTREAL PROTOCOL ACTIVITIES

14. Activities discussed in Sections A, B, and C below are reflected in a one page milestone summary table appended as Annex F.

A. Status of Bank-assisted Country Program Preparation

15. The Bank has now completed its reviews and approved Country Program documents for six (6) countries. Two Bank-supported Country Programs (those for Ecuador and Mexico) were also submitted by their respective Governments and endorsed by the EC at its last meeting. Two new Country Programs (Jordan and Tunisia) have been prepared in consultation with respective countries and have been submitted in final draft for Government formal review and submission to the MP EC. Country Programs for Egypt, Turkey, Jordan, Chile and Tunisia are expected to be submitted to the EC for approval at its June 23-25 meeting.

16. Delays in preparing Country Program have been encountered in Brazil, Philippines, Thailand, and Venezuela for periods of from 1 to 11 months. The status of country program preparation is provided in the table below:

Country Program	Transmittal Target Date	Variance (months)	Comments/Explanations
Brazil	July 1992		Draft CP documents ready for Bank review by June 1992
Chile	March 1992	2 mos. Delay	CP expected to be presented to the EC by the GOC in June 1992
China			UNDP has lead, WB is collaborating.
Egypt	January 1992		GOE still considering policy issues, may submit CP at June EC meeting
Iran	July 1992		UNDP has lead. WB is maintaining a watching brief.
Jordan	February 1992	1+ mo. Delay	Internal delays. Transmitted to Government on April 7, 1992. We anticipate Jordan will present its CP to the EC in June.
Nigeria	December 1992	2 mos. Delay	TOR for CP mission sent to Government in April 1992. Government requested direct responsibility for CP preparation and a extended timetable to facilitate this increased level of direct involvement has resulted.
Philippines	February 1992	8-11 mos. Delay	Delay is due to lack of anticipated funding from European Commission. Estimate CP will be completed in 6-9 mos.
Thailand	June 1992		
Tunisia	May 1992		May mission aims to finalize CP. We anticipate Tunisia will present the CP to the EC in June.
Turkey	January 1992		May mission will finalize CP. Turkey will present to EC in June.
Venezuela	March 1992		Target date is now presentation to EC in October 1992

B. Status of MP Investment Projects Previously Submitted to the Executive Committee

17. The Grant Agreement for the first Montreal Protocol project, the Ozone Pilot Recycling and Training Project for Mexico, was signed in April 1992 and implementation of the project has begun. Good progress has been made towards finalizing agreements on the previously delayed design/engineering projects in the Philippines and Thailand.

Country/Project	Executive Committee Decision	Project Appraisal	Status of Grant Agreement	Comment
Mexico - Ozone Pilot Recycling and Training Project	Approved, June 1991	September 1991	April 1992	This is the first MP project to begin implementation
Philippines - Controlled Substances Engineering Project	Approved, June 1991	November 1991	Project has been agreed with GOP, pending signature	GOP delay due to lack of European Community CP funding
Thailand - Controlled Substances Engineering Project	Approved, June 1991	November 1991	Grant Agreement has been sent to GOT for approval/ signing	Scope of project was revised and $ amount reduced per tri-lateral coordination with USEPA, MITI, & Thailand
Mexico - Line of Credit I	Approved*, November 1991	April 1992	Anticipate signing before September 1992.	Agreement can signed regardless of resolution of policy options for ODS phase-out.
China - ODS Phase Out Project	Approved*, February 1992	June 1992	Signing possible by August 1992	Pre-appraisal/appraisal mission underway in June
Egypt - MCMC Compressor Project	No Decision**	Not yet scheduled		Project under review with Government
Malaysia - MP ODS Phase-out: (a) MACS recycling, and (b) Halon control, recovery and recycling	Approved*, February 1992	February 1992	Signature of Grant Agreement is imminent	Malaysia projects combined into one project and reconfigured to suit available funds. Revised project dispatched to GOM for review.

* With the understanding that additional project documentation would be provided to the EC at its next meeting.

** The project was withdrawn by Egypt for further consideration of technology transfer details. Resubmission to the EC is anticipated in due course.

C. **Status of MP Investment Projects Planned for Executive Committee Review in 1992.**

18. Since January, there have been variances from plan in 10 of the 13 countries where the Bank has been preparing MP investment projects. In three countries (Turkey, Brazil and Venezuela) apparent delays are in fact the outcome of a different EC meeting schedule. The following table provides details of the status of projects planned for 1992 but not considered by the EC before June 1992.

Asia and the Pacific			
Country/Project	**Planned Bank Appraisal Date**	**Variance from Schedule in Work Program (in mos.)**	**Comments/Explanations**
Malaysia - 2nd Tranche	February 1992	Rescheduled	The $10 million second tranche, originally scheduled for presentation to the EC in April is now to be undertaken in sequence with the 1st tranche project of $1.63 million.
Philippines - TBD	August 1992	Rescheduled	The first major investment project is being designed by the Engineering Project which is expected to be signed by the GOP in June.
Thailand - ODS Phase Out Investment Project	May 1992	2 mos. Delay	The first major investment project is being designed by the Engineering Project which is expected to be signed by the GOT in June.
Latin America and the Caribbean			
Country/Project			
Brazil - MP ODS Elimination Project	June 1992	2 mos. (rescheduled)	Change in EC meeting date has delayed appraisal. Amount reduced from $16 million to $8 million.
Chile	June 1992	Possibly no major investment projects	Chile investment projects were scheduled for EC review in April 1992, but the CP does not propose large investments.
Ecuador - TBD	May 1992	6 mos. Delay	Feasibility studies approved by EC are underway. Submission of aerosol project is planned for October EC meeting.

Venezuela - MP ODS Elimination Project	June 1992	First project on time. Second major operation planned in sequence for 6 months later	First project - for Plasticos Molanca -is $1.2 million investment in OS alternative in foam blowing.
Middle East and North Africa and Europe and Central Asia Regions			
Country/Project			
Egypt - MCMC Compressor Project	May 1992	To be rescheduled	Project under review with GOE, and technical uncertainties being reviewed with OORG in September, 1992.
Iran - TBD	None yet		Anticipated submission to the October EC meeting
Jordan - Technical Assistance & Investment Project for Reduction of Consumption of ODS	September 1992		To be submitted to the June EC meeting
Turkey - Protection of the Ozone Layer Through the Reduction of the Consumption of ODS	May 1992	2 mos. (rescheduled)	Variance due only to change in EC meeting date. To be submitted to the June EC meeting
Tunisia - Ozone Layer Protection through the Reduction of Consumption of ODS	None		To be submitted to the June EC meeting
Africa			
Country/Project			
Nigeria - TBD	April 1993		TOR for CP study and associated feasibility studies sent to GON on March 26, 1992.

D. OORG Reviews of Proposed MP Projects in the Period April - May, 1992

Country - Project (no. of Sub-projects)	Bank Task Manager (TM)	Bank Technical Advisor(s)	OORG-Roster Outside Specialist(s)
Brazil - MP ODS Elimination Project (6)	Don Rhatigan	Ken King	Lambert Kuijpers (6)
China - ODS Phase Out Project (6)	Don Brown	Don Rhatigan	Lambert Kuijpers (1)* Geno Nardini (1)* Mike Jeffs (1)* Hans Lagerhorn (3)
Jordan - Technical Assistance & Investment Project for Reduction of Consumption of ODS (1)	Sherif Arif	Don Rhatigan	Geno Nardini*
Thailand - ODS Phase Out Investment Project (2)	Konrad Von Ritter	Don Rhatigan	Lambert Kuijpers Art Fitzgerald*
Tunisia - Ozone Layer Protection through the Reduction of Consumption of ODS (7)	TBD	Ken King	Lambert Kuijpers (7)*
Turkey - Ozone Layer Protection through the Reduction of Consumption of ODS (3)	Jeremy Oppenheim	Don Rhatigan	Lambert Kuijpers (2)* Mike Jeffs (1)
Venezuela - MP ODS Elimination Project (2)	Don Rhatigan	Don Brown	Mike Jeffs

* Confirmed assignments, others anticipated.

IV. WORK PROGRAM AND BUDGET

This section provides the status of the World Bank's MP work program budget and financing.

19. Since the last Executive Committee meeting the Bank has received transfers of $12,030,000 for project investments (China, $6,000,000; Mexico, $4,000,000; Malaysia, $1,630,000; and Ecuador, $400,000) and $1,150,000 for work program activities from the IMFMP.

20. The CY92 Work Program budget summary in Table 2 is unchanged from that presented to the EC in February. It has not been adjusted for variances in country program or project preparation activities nor for new initiatives in additional countries such as India or Guatemala.

21. Table 3, CY92 Planned Approvals/Commitments, includes investment allocations now anticipated for Jordan ($1.5 million) and Tunisia ($2.0 million), and a decrease in the Malaysian allocation from $3 million to $1.63 million, per the EC's approval in February.

22. Table 4 presents the financial status of Montreal Protocol projects which already have been approved by the Executive Committee. Nearly $1 million in pre-investment project activities in Mexico, Philippines and Thailand have been approved by the EC, and roughly $20 million in project financing has been authorized for China, Malaysia and Mexico. Since the Grant Agreement for the first Montreal Protocol project in Mexico was just signed in April, first disbursements are not anticipated before the next quarter.

23. Table 5 is a copy of the CY91 Statement of Cash Receipts, disbursements and Fund Balance which was prepared for UNEP in its role as Treasurer of the IMFMP.

TABLE 2

INTERIM MULTILATERAL FUND OF THE MONTREAL PROTOCOL

World Bank Work Program

WORK PROGRAM BUDGET SUMMARY

		CY92 Estimates			
		No. of	Work Program Budget (US$)		
I.	Country Work Programs a/	Manweeks b/	CP/Studies c/	Proj.Prep.	Total
	Argentina	32.0	$149,337		$149,337
	Brazil	70.0	$123,788	$191,878	$315,666
	Chile	47.2		$191,878	$191,878
	China	70.4		$180,000	$180,000
	Ecuador	132.0 d/	$76,102	$95,026	$171,128
	Egypt	46.0	$27,526	$227,827	$255,353
	Iran	3.2		$20,000	$20,000
	Jordan	12.0	$70,000		$70,000
	Malaysia	32.0		$120,000	$120,000
	Mexico	54.0		$292,076	$292,076
	Nigeria	92.4	$271,255	$144,078	$415,333
	Philippines	17.0		$100,000	$100,000
	Thailand	56.0	$160,000	$120,000	$280,000
	Tunisia	40.0	$125,000	$50,000	$175,000
	Turkey	44.0	$13,515	$217,687	$231,202
	Venezuela	38.0	$61,591	$107,058	$168,649
	TOTAL-Country WP	786.2	$1,078,114	$2,057,508	$3,135,622
II.	**Administration, Legal and Financial Costs e/**				**$1,347,550**
	TOTAL BUDGET				$4,483,172

a/ Budget amounts reflect costs of project preparation and country programmes and associated overhead costs.
b/ Planned manweeks for World Bank higher level staff, international and local consultants.
c/ Includes country programmes and supporting technical studies, these underpin project preparation.
d/ About 80% is for local consultant weeks.
e/ Budget amounts for operations coordination, related policy analysis and review, legal and financial administration and associated overhead costs.

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TABLE 3

Montreal Protocol Interim Multilateral Fund

World Bank Work Program

CY92 PLANNED APPROVALS/COMMITMENTS

(In US$'million)

Country	No. of Projs.	Project Type	Total Project Cost	Planned Approval/Commitment Dates				TOTAL CY92
				Jan-Mar '92	Apr-June '92	Jul-Sept'92	Oct-Dec'92	
Brazil	1	Project Financing	8.00			8.00		8.00
Chile	1	Project Financing	1.00				1.00	1.00
China	1	Project Financing	14.90			14.90		14.90
Ecuador	1	Project Financing	3.00				3.00	3.00
Egypt	1	Project Financing	2.40			2.40		2.40
Jordan	1	Project Financing	1.50				1.50	1.50
Malaysia	1	Proj. Financing-Phase I	1.63		1.63			1.63
		Phase II	10.00			10.00		10.00
Mexico	1	Demonstration Proj.	0.18	0.18				0.18
	1	Project Financing	4.00		4.00			4.00
Philippines	1	Engineering Proj.	0.40	0.40				0.40
	1	Project Financing	10.00				10.00	10.00
Thailand	1	Engineering Proj.	0.39	0.39				0.39
	1	Project Financing	11.00				11.00	11.00
Tunisia	1	Project Financing	2.00				2.00	2.00
Turkey	1	Project Financing	3.50			3.50		3.50
Venezuela	1	Project Financing	1.30				1.30	1.30
	1	Project Financing	3.00				3.00	3.00
TOTAL	17	TOTAL	**78.20**	**0.97**	**5.63**	**38.80**	**32.80**	**78.20**

Definition of Project Types

Project Financing: Relatively large, multi-million dollar, multi-project, investment packages, meeting Montreal Protocol project criteria and implementation guidelines, which will often be disbursed through financial intermediaries on terms to be determined by country Governments, within the context of the country's Country Program, related policies and institutional arrangements.

Pre-inv. Activities: Activities preceding major project identification and design which are effectively engineering design projects, demonstration or pilot projects or research and development.

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Table 4

INTERIM MULTILATERAL FUND OF THE MONTREAL PROTOCOL

World Bank Work Program

FINANCIAL STATUS OF IMFMP PROJECTS
(US$ MILLION)

		Authorized Work Program Funding a/	Approved Commitments b/ thru 31-Mar-92	Disbursements thru 31-Mar-92 c/ Current Calendar Year	Cumulative Total
PRE-INVESTMENT ACTIVITIES					
Mexico	Ozone Pilot Recycling and Training Project	0.18	0.18	0.00	0.00
Philippines	Controlled Substances Engineering Project	0.40	0.40	0.00	0.00
Thailand	Controlled Substances Engineering Project	0.39	0.39	0.00	0.00
	Sub-total Pre-Investment Activities	0.97	0.97	0.00	0.00
PROJECT FINANCING					
China	ODS Phase Out Project	6.00	0.00	0.00	0.00
Ecuador	To be determined	0.40			
Malaysia	MP ODS Phase Out Project	1.63	0.00		
Mexico	Line of Credit	4.00	0.00	0.00	0.00
	Sub-total Project Financing	12.03	0.00	0.00	0.00
GRAND TOTAL		13.00	0.97	0.00	0.00

a/ Project funding authorized by the IMFMP Executive Committee for the World Bank.
b/ Projects approved by the World Bank management.
c/ Project disbursements commence after signing of the Grant Agreement by the Bank and the recipient country.

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TABLE 5

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
AS ADMINISTRATOR FOR THE MULTIPLE DONORS GRANT
MONTREAL PROTOCOL MULTILATERAL FUND
FOR PROTECTION OF THE OZONE LAYER
STATEMENT OF CASH RECEIPTS, DISBURSEMENTS AND FUND BALANCE
(Expressed in United States dollars)

	March 14, 1991 (inception) to December 31, 1991
Receipts	
Contributions	$ 5,000,000
Investment income	116,741
Total receipts	5,116,741
Disbursements	
Salaries	183,100
Consultant fees	454,748
Travel	296,925
Contractual services	90,000
Benefits and overhead	
Staff	267,753
Consultants	214,801
Total disbursements	1,507,327
Excess of receipts over disbursements	$ 3,609,414
Fund balance consists of:	
Cash and investments	$ 3,609,414

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V. ANNEXES

ANNEX A.	Minutes of the First Ozone Operations Resource Group (OORG) Meeting
ANNEX B.	Letter from GEF Operations Coordinator to EC Chairman on Egypt's MCMC compressor project proposal.
ANNEX C.	Letter from International Finance Corporation (IFC) to Director, Egyptian Environmental Affairs Agency on Egypt's MCMC compressor project proposal.
ANNEX D.	Technical Opinion on HCFC-22 use in foams, Mike Jeffs, OORG Foams Sector Advisor
ANNEX E.	World Bank Investment Project Cycle
ANNEX F.	World Bank CY92 Work Program Milestone Summary Table

ANNEX A

FIRST OZONE OPERATIONS RESOURCE GROUP (OORG) MEETING
April 21, 1992 World Bank Headquarters
- MINUTES OF THE MEETING -

I. ATTENDANCE:

Chairman -	Ken Newcombe, ENVGC
Technical Advisors -	Sherif Arif, Bernard Baratz EMTEN; Don Brown, ASTIF; Don Rhatigan, LA1EI; Ken King, ENVPR; Tom Waltz, ENVGC.
Task Managers & Coordinators -	Chuong Phung, LA2C1; Luis Pisani, LA4HR; Kathy Sierra, LACVP; Konrad Von Ritter, Zia Ahmed, EA1IE; C. H. Zhang, ASTEN; Michele de Nevers, Abigail Osae-Addo, LATEN; Bilal Rahill, EMTEN.
OORG Members -	Geno Nardini, Aerosols; Simon Oulouhojian, MACS; Lambert Kuijpers, Refrigeration; Mike Jeffs, Foams; Art Fitzgerald, Solvents; Hans Lagerhorn, Halons.
USEPA -	Eileen Claussen, Vice Chair, MP Executive Committee, Steve Siedel, Steve Anderson
MP Secretariat -	Omar E. El-Arini, Chief Officer (represented by Mr. Smirnov)
NGO's -	Liz Cook, Friends of the Earth
	Kevin Fay, Alliance for Responsible CFC Policy

2. Summary of Introductory Remarks

The following points were made in opening remarks:

* Henceforth, the OORG is meant to be the Bank's eyes and ears on commercially ready leading edge technologies and techniques which should be provided to eligible developing countries to assist them to phase-out ODS's.

* Accordingly, we will require signed technical opinions from the OORG on every MP project to be presented to the MP Executive Committee, through the Secretariat.

* To provide an understanding of the operational environment and of Bank project preparation and approval procedures, we would like the OORG members to participate in at least one mission in the next 12 months.

* Recognizing that OORG members' services are already in heavy demand, each OORG member was asked to indicate at least two peers as backup advisors to help out in the event that they themselves are not available for preparing technical opinions, participating

in ODS project preparation missions, and offering other forms of advice.

* In addition to designating peers who can advice on the leading edge of technology and practice in respective OS sub-sectors, OORG members were also requested to identify individual consultants competent to assist task teams in preparing MP projects.

* As the technical advisory group to the Bank in fulfilling its role of financing MP investment projects, the OORG will receive copies of all relevant technical documentation prepared in the Bank or by external consultants at every stage of project development and execution.

* Bank MP Projects will take a range of generic forms including pilot projects (under streamlined procedures), major investment projects, eg. plant conversions, Sectoral ODS Operations addressing specific sub-sectors across countries, and Country ODS phase-out operations, which are effectively funding a time-slice of an investment program identified by Country Programs. Both Sectoral and Country ODS phase-out operations will normally be based on Bank small scale enterprise operations which are designed as lines of credit through financial intermediaries.

2. Regional and Sectoral Project Reviews (OORG Advisors, TMs and TAs)

Project plans for CY92 were reviewed by region with regional staff and task managers (TMs) during the morning session. After this session, OORG advisors were familiarized with specific operations, on-going project planning, by region and country.

3. Sectoral Technical Options Reviews

During the afternoon session, each OORG member gave a presentation on the key background issues and options in each major ODS sub-sector. Salient points included:

<u>Aerosols - Geno Nardini</u>

* In Mr. Nardini's opinion, a unique characteristic of the aerosol industry is that there is no "cutting edge" of technologies in that sector. One reason has been that the shift out of CFC use in the sector has been underway for sometime now and most technical problems <u>per se</u>, for most applications, have been developed successfully.

* However, there are some serious problems in terms of the appropriateness of training and certification of operators of those technologies and project design configurations.

* On example is the use of "molecular sieves", natural gas purification technology. The effectiveness of this technology depends critically upon the quality of the gas or LPG which is processed by it. If the gas is too "dirty", the sieve will clog up and no longer function properly. The only solution is to ensure that users understand the importance of appropriate LPG quality standards prior to using the technology and that they take steps to ensure that they never use anything but aerosol grade LPG in their equipment.

* Another example is in the design of appropriate hydrocarbon storage facilities for use in hydrocarbon filler processing operations. Here, it is not just the inclusion of a proper

storage facility that is important, but the size and location of the prospective plant site. If the site is too small, it might be impossible to locate the storage facility at all economically or safely.

* Economies of scale in terms of the training and use of skilled operational personnel, safety, etc., suggest that there are substantial economic and safety advantages in siting LPG production/purification plants on a regional basis.

* Another critical need is for standard, optimal LPG production plant size models. Once the Bank receives plant identifications from Mr. Nardini we will follow-up with site visits, etc., to obtain necessary technical information.

Mobile Air Conditioning (MACS) - Simon Oulouhojian

* In literally every area, and particularly in the mobile air conditioning (MACS) sector, there is a need to incorporate in all projects the roughly 90% of technical agreement on technical standards and guidelines which has been achieved globally already on the best practice for dealing with ODS problems. This need is closely tied to training requirements. Unless technicians are adequately trained and informed, project success will be at considerable risk. In most cases these standards are well documented and respective OORG advisors will provide the Bank with a selection of best practice standards documentation for sector projects (such as SAE standards essential for recycling equipment selection and operation).

* Particularly in view of the fact that refrigerant leakage is a major source of ODS venting in developing countries, it is essential that technicians receive approved training for leak testing and repair as well as the implications of venting CFCs to the atmosphere.

* The inadvertent mixing (cross-contamination) of incompatible refrigerants and equipment, including recycling equipment, is a serious risk due primarily to the fugitive marketing of so-called drop-in "blend" refrigerant replacements which are anything but. Here again, one possible control is to require that the right to purchase, say HFC-134a, requires certification of proper training and education.

* Similarly, a general rule in usage is that CFC-12 and HFC-134a recycling systems must be maintained entirely separately in order to avoid any risk of cross-contamination.

* Although it is technically possible to fabricate recycling machines entirely in LDCs, the process is very complicated and requires a high level of standards specification and technician training. In this regard, the Bank's task managers would like to have a list of recycling equipment manufacturers (equipment capabilities, prices if possible, etc.) together with the minimum training requirements which might be required in fabrication and/or operation of the equipment (some general standards on MAC recycling and servicing procedures were provided by Mr. Oulouhojian and are attached).

Refrigeration (including chillers) - Lambert Kuijpers

* Although a great deal of work has gone into the search for alternative refrigerants and some, such as HFC-134a, show great promise, there is still some danger in moving too quickly, particularly for countries (such as most of the Bank's clients) which import

refrigerants, refrigeration components, or that manufacture refrigerators themselves.

* The major design uncertainties still revolve around the need to identify the best lubricant and achieve sufficient confidence that it will work effectively over long periods of time.

* Developing countries are typically small users, face severe foreign competition, lack the necessarily high technical education levels to progress, are characterized by old and out of date equipment, and are fraught with leakage problems in refrigerant service and handling.

* Thus, in this sector as in aerosols and MACS, appropriate training and technical networking will be essential to success.

* The leading edge of commercially available options presently includes recycling, absorption, retrofits and new products using HCFC-22; and in large storage and air conditioning units, ammonia, HCFC-123, HCFC-22, and HFC134a.

* Next-in-line refrigeration technologies are likely to include some HFC-134a in virtually all sub-sectors with introduction beginning in 1993, and much lesser applications of HFC-152a. It is likely that drop-in mixtures will also be developed to replace R-502 in retail, commercial, and small storage units.

* The speed of developments, and their significance globally, are considerable in the refrigeration sector and thus, there was general agreement that an early refrigeration-based sector meeting be pursued in conjunction with the planning for the next OORG meeting to update our data and understanding. Mr. Lambert anticipates, for example, that the details of commercially ready and available HFC-134a refrigeration technologies (including likely differences in maintenance requirements) will be clarified within the next 2 to 12 months.

Foams - Mike Jeffs

* The basic issues in foam thermal insulation are HCFC availability in future, hydrocarbon alternative safety considerations, and alternative costs.

* Although reduced CFC-11 applications are commercially available and widely used in polyurethane rigid foam manufacture, zero ODP alternatives are still limited.

* It is anticipated that next-in-line alternatives in rigid polyurethane, rigid phenolic, rigid and sheet extruded polystyrene, and polyolefin will involve HFCs beginning in 1996.

* Mr. Jeffs does not believe that HCFC-123 will be available for the 1995 phase-out deadline in developed countries due to the long delays involved in toxicity testing and certification of acceptable manufacturing conditions to control occupational health risks.

* Typical domestic refrigerator requires three times as much CFC in foam manufacture than in the compressor. Also the area where the greatest refrigerator ODS reduction can take place.

Solvents - Art Fitzgerald

* Mr. Fitzgerald reviewed a number of ODS reducing solvent technologies including white spirits, HCFC solvents, aqueous, hydrocarbon/surfactant blends, pressurized gases, CO2 particle, vaporizing oils, and no clean technologies (among many others).

* The clear message in the solvents sector is that alternatives abound, but that the variety of possible solutions is such that special attention must be paid to selecting the right path.

* The technically feasible phase-out schedule depends upon the state of development of a given country and whether or not it has strong technology transfer partnerships, since a great deal of the transition is fostered through multinational companies which are often driven by home-country decisions and public pressures to make the transitions across the board.

Halons (and sterilants) - Hans Lagerhorn

* The true market for halons is probably only about 5 to 10 % of present usage levels due to past overselling of the relative virtues and cultural resistance to changing to new and even better alternatives in nearly all uses.

* To a certain extent, this "misinformation" has even been codified in regulations, such as in China where fire regulations require halons be used. Again, appropriate training of fire-control technicians is critical.

* In the meantime, there is much evidence that excess supplies of halons are building up and being dumped in LDC's as a result. Some thought should therefore be given to substitution for on-going new production, long-term storage and/or destruction technologies (although destruction costs at present run an exorbitant $10 /kilo.

4. Future Meetings of the OORG

* OORG members preferred to meet 3-4 times per year until they were fully familiar with their roles and major technical issues in technology transfer had been resolved. They also requested 2-day rather than one day meetings in order to review in more depth particular issues both ad hoc or through planned special sub-sessions to decide on standard or revised technical packages for particular phase-out activities. Whenever possible, efforts will be made to dovetail future OORG meetings with major ODS-related events where OORG members and specialists would normally gather.

* The next OORG meeting will be held in Washington, September 27-28th, before the International CFC and Halons Alternatives Conference, sponsored by the Alliance for Responsible CFC Policy, September 29 through October 1, 1992, and will incorporate a session with invited specialists on domestic refrigeration technical packages which can be recommended as standards for Bank IMFMP projects.

Attachments (copies of handouts during the meeting)

FIRST OORG MEETING
World Bank Headquarters
April 21, 1992

LIST OF PARTICIPANTS

DATE: Tuesday, April 21, 1992

TIME:

TIME:	Morning session:	9:00 AM - 1:00 PM
	Buffet luncheon:	1:00 PM - 2:00 PM
	Afternoon session:	2:00 PM - 5:00 PM
	Reception:	7:00 PM - 7:30 PM
	Dinner:	7:30 PM - 10:00 PM

PLACE: Conference Room, P - 4054, World Bank

I. PARTICIPANTS:

Chairman - Ken Newcombe, ENVGC

Technical Advisors - Bernard Baratz EMTEN; Don Brown, ASTIF; Don Rhatigan, LA1EI; Ken King, ENVPR; Tom Waltz, ENVGC.

Task Managers & Coordinators - Chuong Phung, LA2C1; Kathy Sierra, LACVP; Konrad Von Ritter, Zia Ahmed, EA1IE; C. H. Zhang, ASTEN; Abigail Osae-Addo, LATEN; Bilal Rahill, EMTEN; Paul Ballard, Charles Catanach, AFTIE; Dana Younger, IFC; Laura Tlaiye.

OORG Members - Geno Nardini, Aerosols; Simon Oulouhojian, MACS; Lambert Kuijpers, Refrigeration; Mike Jeffs, Foams; Art Fitzgerald, Solvents; Hans Lagerhorn, Halons.

II. OBSERVERS, RECEPTION & DINNER PARTICIPANTS:

USEPA - Eileen Claussen, Vice Chair, MP Executive Committee, Steve Siedel, Steve Anderson

MP Secretariat - Omar E. El-Arini, Chief Officer (represented by Mr. Smirnov)

NGO's - Liz Cook, Friends of the Earth

Kevin Fay (invited), Alliance for Responsible CFC Policy

FIRST OORG MEETING
World Bank Headquarters
April 21, 1992

AGENDA

I. MORNING SESSION

9:00 AM - 10:00 AM

A. Introductory Remarks - Ken Newcombe

* OORG Terms of Reference
* Role of the Bank and the Project Cycle
* Issues and Problems to be Addressed by this Meeting

10:00 AM - 1:00 PM

B. Project by Project Review - Respective Task Managers

10 AM - 11 AM	*	ASIA - China, Malaysia, Philippines, Thailand TM's - Von Ritter, Brown
11 AM - 12 PM	*	LAC - Brazil, Chile, Ecuador, Mexico, Venezuela TM's - Sierra, Rhatigan, Phung, Tlaiye
12 PM - 1 PM	*	EMENA - Egypt, Iran, Tunisia, Turkey TM - Rahill
	*	AFRICA - Nigeria TM - Ballard, Catanach

II. LUNCH (1:00 PM - 2:00 PM)

III. AFTERNOON SESSION

2:00 PM - 4:00 PM

A. Sector by Sector Review

* Aerosol Sector Projects (Mr. Geno Nardini)
* Mobile Air Conditioning Sector (MACS) Projects (Mr. Simon Oulouhojian)
* Refrigeration & Chillers Sector Projects (Dr. Lambert Kuijpers)
* Foams Sector Projects (Mr. Mike Jeffs)
* Solvents Sector Projects (Mr. Art Fitzgerald)
* Halons Sector Projects (Mr. Hans Lagerhorn)
* Other Sector Projects (All)

4:00 PM - 5:00 PM

B. On-going Interactions with OORG

* Roster of Peer Sector Experts
* Technical Review Participation
* Documentation and Communication Exchanges
* Project Preparation and Mission Participation

V. RECEPTION

7:00 PM - 7:30 PM

VI. DINNER

7:30 PM - 10:00 PM

"The Future of the Montreal Protocol", a dinner talk, to be given by Ms. Eileen Claussen, Vice Chair, Executive Committee of the Montreal Protocol.

ANNEX B

The World Bank
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

1818 H Street, N.W.
Washington, D.C. 20433
U.S.A.

(202) 477-1234
Cable Address: INTBAFRAD
Cable Address: INDEVAS

April 13, 1992

H. E. Mr. Juan Antonio Mateos
Chairman
Montreal Protocl Executive Committee
c/o Dr. Omar El-Arini
Chief Officer
Montreal Protocol Secretariat
1800 McGill College Avenue, 27th Floor
Montreal H3A 3J6
Quebec
CANADA

Dear Ambassador Mateos:

I am pleased to report to you, and through you to the Egyptian delegation to the Executive Committee under the Montreal Protocol, that since the February EC meeting, we have been able successfully to resolve the problems confronting the initial Egyptian proposal for an MCMC compressor project to be funded by the Interim Multilateral Fund under the Montreal Protocol.

Specifically, the International Finance Corporation (IFC) which has now entered into an investment agreement for this MCMC plant, is fully prepared to support a properly developed proposal from MCMC to cover the incremental costs associated with a shiftover to the manufacture of compressors that utilize non-CFC refrigerants. Furthermore, IFC has confirmed that it is prepared to assume management responsibility for preparing and appraising the eventual MCMC conversion project as an associated IFC project. The World Bank, in turn, will collaborate in this effort to ensure that related consultant and other technical support is timely and well coordinated.

Finally, the IFC will be confirming these understandings by letter directly to Dr. El-Mohamady Eid, First Secretary, Egyptian Environment Affairs Agency, and Mr. Salah Hafez, Chairman-in-Charge of the Egyptian Environment Affairs Agency in Cairo. The letter will request the Government of Egypt to re-submit the MCMC proposal for consideration at the June 1992 meeting of the Executive Committee.

We are confidant that these arrangements and understandings have now successfully resolved any previous misunderstandings concerning the project.

With best regards.

Sincerely yours,

Signed

Ken Newcombe
GEF Operations Coordinator
Environment Department

International Finance Corporation
Engineering Department

1818 H Street, N.W.
Washington, DC 20433
U.S.A.

Telephone: (202) 477-1234
Engineering Dept. Fax: (202) 334-8705
World Bank/IFC Fax: (202) 477-6391
Telex: 248423, 64145, 82987

May 11, 1992

Mr. Saleh Hafez
Chairman
Egyptian Environmental Affairs Agency
11 A Hassan Sabri Street
Zamalek, Cairo
Egypt

SUBJECT: EGYPT: MCMC Compressor Project
IMFMP Grant Application

Dear Mr. Hafez:

At the last meeting of the Executive Committee of the Montreal Protocol in February, the Egyptian delegation headed by Dr. El Mohamadi Eid submitted on behalf of your Government a project for funding the incremental costs associated with a shiftover to the use of non-CFC refrigerants in the compressors to be manufactured by the Misr Compressor Manufacturing Company (MCMC). This project, "Conversion of Refrigerating Compressors to HFC-134a by MISR Compressor Manufacturing Co. (MCMC)", was to be funded by a grant from the Interim Multilateral Fund for the Montreal Protocol (IMFMP). This project was identified during a World Bank mission which visited Egypt in July 1991 and was included as part of the Country Program that the Bank assisted the Government to develop.

At that time, MCMC was still in the process of exploring with the International Finance Corporation (IFC), the private sector financing affiliate of the World Bank Group, an investment agreement to partially finance the construction and operation of the MCMC factory which was designed to manufacture L series high performance reciprocating hermetically sealed compressors to be utilized in the fabrication of refrigerators, freezers and water coolers using the current refrigerant CFC-12. In March 1992, IFC and MCMC entered into a $16.84 million investment agreement to support construction of the MCMC plant. MCMC's technology partner is Whirlpool Italia (formerly Industrie Riunite Eurodomestici or IRE). Under a 1987 Licence and Technical Assistance Agreement between MCMC and IRE (now assumed by Whirlpool Italia), Whirlpool is committed to provide MCMC with information on improved compressor designs and on manufacturing process modifications to accomplish the shiftover to the manufacture of compressors configured to utilize a CFC-12 substitute refrigerant.

At the sixth IMFMP Executive Committee meeting in February 1992, the Bank representative, acting on behalf of the IFC, recommended against the financing of this proposed grant project on the grounds that the shiftover was already to be accomplished through the technical assistance agreement between MCMC and

Whirlpool and that financing the incremental costs for MCMC to independently shiftover its production to the non-CFC refrigerant based compressor design through the IMFMP might jeopardize the technology licensing agreement. The Egyptian delegation temporarily withdrew the project to allow the parties to examine the Licence and Technical Assistance Agreement in order to determine whether this proposed grant project is fully consistent with the agreement.

After a careful review of the situation involving the World Bank, IFC, Whirlpool and MCMC (including its Chairman and Managing Director Dr. Salah El-Deeb), the parties are satisfied that financing the incremental costs of the shiftover to the non-CFC refrigerant can be done through an IMFMP grant without violating the technology licensing agreement. However, our recent contacts with the technical staff of Whirlpool Italia indicate that while HFC-134a continues to be the most likely substitute for CFC-12, they are experiencing technical problems with its usage as a substitute refrigerant. Whirlpool feels that these problems, being experienced by other leading compressor manufacturers, will likely take six to seven months to resolve. Therefore there is no definitive basis available today upon which to estimate the actual incremental costs associated with the shiftover in order to better define the grant project's costs.

As a member of the World Bank Group, IFC is eligible to implement IMFMP projects. As IFC has an investment agreement with MCMC, IFC and the Bank have agreed that IFC will have the lead responsibility for developing this IMFMP project with MCMC. IFC will function as Task Manager with limited technical support from the Bank's Middle East and North Africa Region's Environment Unit. In light of the present situation we propose that the MCMC grant project appraisal be implemented following the completion by Whirlpool of its engineering modifications. At that time the applicable incremental costs associated with the shiftover will be known and an IFC IMFMP project preparation and appraisal mission can be mobilized to Egypt to appraise the technical and financial aspects of the latest MCMC grant project proposal.

We suggest that if this basis for proceeding is found acceptable, that the Government of Egypt seek the project's reinstatement with the Executive Committee at the earliest opportunity. This will likely occur at the next Executive Committee meeting in June. As this is prior to the finalization by Whirlpool Italia of its technical investigations, this grant request will not be able to fully reflect the actual level of incremental costs associated with MCMC's eventual shiftover to a non-CFC refrigerant configured compressor manufacturing operation. We wish to note that the World Bank's Ozone Operations Resource Group, the independent technical advisory group to the Bank on scientific and technology issues in the design and implementation of

Bank-supported operations to assist the developing countries to fulfill their obligations to phase out ozone-depleting substances controlled under the Montreal Protocol, will meet in September to specifically address this technical issue.

We would expect that as soon as IFC receives from MCMC and Whirlpool definite information on the incremental costs associated with the conversion process that the IFC IMFMP project preparation and appraisal mission would be mobilized. The mission would initially visit Italy along with Dr. El-Deeb to meet with Whirlpool technical representatives to discuss the final technical solution for the substitute refrigerant. The mission would be required to visit Egypt to appraise evaluate the technical and financial aspects of the actual shiftover conversion required at the MCMC factory. This would enable the IMFMP project costs to be developed to reflect actual estimates of incremental costs to be incurred by MCMC.

Following the completion of this appraisal the final IFC approved IMFMP project grant can be processed, a technical review panel can be convened and disbursement made to MCMC after clearance by the IMFMP Executive Committee. It is expected that this could occur before the end of 1992.

We trust that this approach will meet with your approval and look forward to the opportunity to work together in this endeavor. Please contact either myself or Mr. Dana Younger of my staff by telephone at (202) 473-0661 or by fax at (202)676-9495 if you require any further clarification of this matter at this time.

Yours sincerely,

Marty Riddle

Martyn J. Riddle
Chief, Environment Unit

cc: Messrs. Dr. El-Mohamady Eid, Dr. Genena, Dr. El-Deeb, Mr. El-Arini,
Mr. Newcombe, Dr. Arif

bcc & cw: Messrs. Pherwani, Kikuchi

bcc: Messrs. Dehejia, Raczynski, G. Puri, Younger, Hovaguimian, Hamid,
S. Puri, Waltz, Seth, Rahill, Bhargava

ANNEX D

ICI Polyurethanes

Mr. Tom Waltz
ENVGC
P 4045
World Bank
Washington DC
USA

ICI Polyurethanes
Everslaan 45
B-3078 Everberg
Belgium
Telephone 02-758 92 11
Telex 26151 ICIEVB B
Telefax 02-759 55 01

18th May, 1992

Dear Tom,

Sorry to be late replying but I have been out of the office.

<u>Mexican Project on Polystyrene for Food Packaging</u>

I do not support the use of HCFC 22 in this application. There are alternative non-HCFC technologies available. Pentane and butane were used in the past in this application and, with suitable safety precautions, can be used again. An alternative is the technology developed by Dow using CO_2 blowing - this I believe is patented.

I hope this is sufficient commentary - it appears to be a clear - cut case to me.

<u>Additional Consultant for Country / Foam Studies</u>

I have another candidate for you. His name is Dr. K. Kyriacos. He is a polyurethane foam specialist who has worked in Europe, Africa and Asia.

He is currently self-employed and contact details are :

<u>Address</u> Leuvensesteenweg 94
3080 Tervuren
Belgium

<u>Tel & Fax no</u> 32-2-767-3542

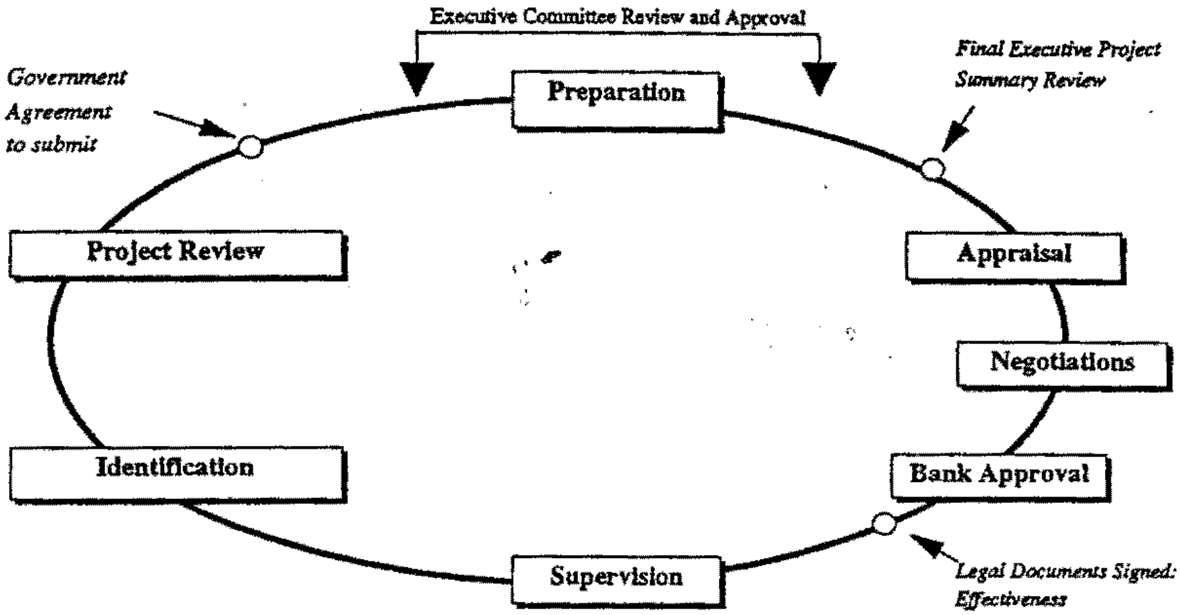
I have sent my OORG meeting expense form and other registration papers to Johanna Klous.

Mike Jeffs

<u>G. M. F. Jeffs</u>
GMFJ/KD

ANNEX E

Montreal Protocol Investment Project Cycle



Steps in the Cycle

Identification	Projects typically arise from country programs and pre-investment studies
Project Review	Projects are prepared as initial executive project summaries (MP-IEPS) and subject to departmental and OORG technical review. To expedite MP implementation initial and final MP-IEPS reviews can be combined
Preparation	Substantial preparation begins when project review is complete and may take from 2-12 months depending on complexity
Government Agreement	Governments must agree to the Bank's submission of their projects for MP Executive Committee approval. Usually this permission is obtained in writing.
Executive Committee Approval	Projects are submitted to the EC about one month before EC meetings. Revised MP-IEPS or FEPS documents are required. Content must meet EC guidelines. Projects may be at any stage in preparation beyond MP-IEPS review.
Appraisal	Follows FEPS review and MP Executive Committee approval for projects above $500,000.
Negotiations	Follows successful appraisal and review of final draft MP Project document (Yellow Cover Memorandum of the Director).
Bank Approval	Management approve the allocation of funds from the Ozone Projects Trust Fund (OTF) for the project as OTF Trustee.
Supervision	Supervision missions typically occur every 3-4 months early in project life. Reports are provided on implementation performance in Bank Progress reports to each Executive Committee meeting.

ANNEX F

WORLD BANK — MONTREAL PROTOCOL CY92 WORK PROGRAM MILESTONE SUMMARY — AS OF MAY 22, 1992

	Status	Country Program			Investment Project					Approved	Revised
REGION Country		Main Mission	Final Report	Gov. Approval	Project Title	EPS	EC Approval	Bank Appraisal	Grant Agreement	EC (millions)	CY92* (millions)
AFRICA											
Nigeria	Plan	Jul-92	Oct-92	Dec-92	TBD	Sep-92	Nov-92	Apr-93	Jun-93		$5.00
	Variance	Sep-92	Dec-92	Jan-93		Feb-93		May-93			
ASIA											
China	Plan	UNDP			ODS Phase Out Project	Jan-92	Feb-92	May-92	Jul-92	$14.30	$14.90
	Variance							Jun-92			
India	Plan	TBD			TBD						
	Variance										
Malaysia (I)	Plan				MACS recycling and Halon control, recovery and recycling	Oct-91	Feb-92	Feb-92	Apr-92	$1.63	$1.63
	Variance										
(II)	Plan				TBD	Oct-91	Apr-92	Jun-92	Aug-92		$10.00
	Variance										
Phillipines (I)	Plan				Controlled Substances Engineering Project	May-91	Jun-91	Jan-92		$0.40	
	Variance								With Gov't		
(II)	Plan		Feb-92		TBD	Oct-91	Apr-92	Aug-92	Sep-92		$10.00
	Variance						Change in strategy - phasing				
Thailand (I)	Plan				Controlled Substances Engineering Project		Jun-91	Jan-92			
	Variance								With Gov't	$0.39	
(II)	Plan	Oct-91	Jun-92	Aug-92	ODS Phase Out Investment Project	Oct-91	Apr-92	May-92	Jul-92		$11.00
	Variance										
EMENA											
Egypt	Plan	Aug-91	Jan-92	Feb-92	MCMC Compressor Project	Mar-92	Apr-92	May-92	Sep-92		$2.40
	Variance					Change in strategy - technical uncertainties					
Iran	Plan	UNDP			TBD						
	Variance										
Jordan	Plan	Sep-91	Feb-92	Mar-92	TA & Investment Project for Reduction of Consumption of ODS		Jun-92	Sep-92	Dec-92		$1.50
	Variance		Apr-92			Apr-92					
Tunisia	Plan	Feb-92	May-92	Jun-92	Ozone Layer Protection through the Reduction of Consumption of ODS		Jun-92	Jul/Aug-92	Aug/Sep-92		$2.00
	Variance										
Turkey	Plan	Sep-91	Jan-92	Mar-92	Protection of the Ozone Layer Through the Reduction of Consumption of ODS	Mar-92	Apr-92	May-92	Jul-92		$3.50
	Variance			Jun-92			Jun-92**	Sep-92**	Dec-92**		
LAC											
Argentina	Plan	Jan-93	Mar-93	Mar-93	TBD	Feb-93		Jun-93			$2.00
	Variance										
Brazil	Plan	Feb-92	Jul-92	Jul-92	MP ODS Elimination Project	Mar-92	Apr-92	Jun-92	Aug-92		$8.00
	Variance						Jun-92**				
Chile	Plan	Feb-92	Mar-92	Mar-92	TBD (possibly no investment projects)	Mar-92	Apr-92	Jun-92	Dec-92		$1.00
	Variance		May-92	May-92			**				
Ecuador	Plan		Jan-92	Feb-92	TBD	Feb-92	Apr-92	May-92	Oct-92	$0.40	$3.00
	Variance						Feb-92**				
Guatemala	Plan	TBD			TBD						
	Variance										
Mexico (I)	Plan				Ozone Pilot Recycling & Training Project	Aug-91	Jun-91	Nov-91		$0.18	
	Variance								Apr-92		
(II)	Plan		Oct-91	Oct-91	Line of Credit I	Oct-91	Feb-92	Apr-92	Jun-92	$4.00	$4.00
	Variance										
Venezuela (I)	Plan				Plasticos Molanca Foam conversion project	May-92	Jun-92	Jul-92	Sep-92		$1.30
	Variance										
(II)	Plan	Feb-92	Mar-92		MP ODS Elimination Project	Mar-92	Apr-92	Jun-92	Aug-92		$3.00
	Variance			Oct-92		May-92					
	Total									$21.30	$ 84.23

Mo.-92 Connotes a variance (shown when known) from planned target date — ** Variance due to change in EC meeting date.

* Amount includes investments in CY92 & CY93.