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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-fifth Meeting
Montreal, 29-31 July 1998

PROJECT PROPOSAL: PHILIPPINES

This document includes the comments and recommendations of the Fund Secretariat on the following project proposal:

Solvent

- Elimination of the use of CFC-113, 1,1,1 trichloroethane, (TCA) and CFC 12 at multiple corporations that manufacture special formulations for various industrial markets

UNDP

PROJECT EVALUATION SHEET **PHILIPPINES**

SECTOR: Solvents ODS use in sector (1995): 458 ODP tonnes

Sub-sector cost-effectiveness thresholds: CFC-113 US 19.73.4\$/kg
TCA US 38.50\$/kg

Project Title:

Replacement of the use of CFC-113, 1,1,1 trichloroethane, (TCA), and CFC-12 by HCFC-141b and HFC-134a and various non-ODS alternatives at multiple corporations that manufacture special formulations for various industrial markets.

Project Data	CFC-113, TCAs
ODS phase-out (ODP tonnes)	18.4
Proposed project duration (months)	2 years (Phase II)
Incremental capital cost (US \$)	334,600
- including contingency (%)	10
Incremental operational cost (US \$)	-
Total project cost (US \$)	334,600
Local ownership (%)	100
Export component (%)	-
Amount requested (US \$) {Original}	334,600
{Revised}	-
Cost effectiveness (US \$/kg)	18.2
National Coordinating Agency	Dept. of Environment & Natural Resources, Manila
Implementing Agency	UNDP
Technical review completed?	Yes

<i>Secretariat's Recommendations:</i>	
Amount recommended (US \$)	334,600
Project impact (ODP tonnes)	18.4
Cost effectiveness (US \$/kg)	18.2
Implementing Agency support cost (US \$)	43,498
Total cost to Multilateral Fund (US \$)	378,098

PROJECT DESCRIPTION

Replacement of the use of CFC-113, 1,1,1 trichloroethane, (TCA), and CFC-12 by HCFC-141b and HFC-134a and various non-ODS alternatives at multiple corporations that manufacture special formulations for various industrial markets.

1. The 1991 ODS consumption in the solvent sector in the Philippines was estimated to be 458 ODP tonnes. The 1995 solvent sector consumption is estimated in the project document to be 259 ODP tonnes.
2. This project will eliminate the use of CFC-113, CFC-12, and TCA at four enterprises that custom blend bulk products, generally used for solvents and cleaning applications. These products are sold to the industrial sector throughout the Philippines. The companies are 100% locally owned enterprises, packaging their proprietary custom blended products primarily in drums and pails for the electronics, food, cleaning and maintenance industries.
3. The phase-out will be accomplished by using several non-ODS replacement products in new custom formulations, including HFE solvents, HCFC-141(b) and HFC-134(a). Ventilation and gas detection equipment will be installed. Technical assistance for product formulation and trials quantities of new solvents will be provided. The industries also fill aerosol containers using CFC-12. This is being converted to HFC-134(a), however no funding is sought for the aerosol component. The reasons for the choice of technology are discussed, including the use of HCFC-141(b). Regulatory support measures (restrictions on CFC imports in 1998) are outlined.
4. A previous project, approved at the 19th Meeting, involved phase-out at six similar enterprises. A report on that project (not in the format of a project completion report) is included in this proposal. It indicates that five enterprises said to be addressed by the first proposal, have ceased to use ODS. The first project also included four months of operating costs to enable the first converted enterprises to compete with those which had not converted. No IOC are sought in this project as all enterprises will have converted and will be operating with the same cost structure.
5. This project will complete the phase-out of the providers of custom-blended solvents in the Philippines and UNDP has indicated that the government of the Philippines will not seek any additional funding for this activity.
6. The main components of capital costs are: ventilation systems, US \$30,000 - 40,000 per enterprise; gas detection equipment US \$10,000 per enterprise; technology acquisition and transfer, US \$35,000 total; new solvents for trials purposes, US \$68,000, total.
7. The cost effectiveness of the project is US \$17.8 / kg, compared to US \$15.3 for the first project. This is due to the lower level of consumption of the four enterprises included in this project.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The costs being sought in this project are consistent with those approved for the first project at the 19th Meeting. The conditions of approval for the first project included that the chemicals for trials purposes were to remain under the control of UNDP and that any quantities not required were to be made available for the second project. UNDP has advised that no chemicals were left over from the first project.

2. UNDP advised that one company dropped out of the first project and that it anticipates that some funds will be returned to the Multilateral Fund.

RECOMMENDATION

1. Blanket approval of the project is recommended, including 13 per cent agency support costs, at the level of funding indicated in the table below.

Project Title	Project Cost US \$	Support Cost US \$	Implementing Agency
Replacement of the use of CFC-113, 1,1,1 trichloroethane, (TCA), and CFC-12 by HCFC-141b and HFC-134a and various non-ODS alternatives at multiple corporations that manufacture special formulations for various industrial markets.	334,600	43,498	UNDP