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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL

Fortieth Meeting
Montreal, 16 -18 July 2003

PROJECT PROPOSAL: MEXICO

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposal:

Sterilants

- Sterilization group project to replace CFC-12 technology-based sterilization equipment by alternative technologies in the hospital medical sterilization sector

World Bank

PROJECT EVALUATION SHEET**MEXICO**

SECTOR: Sterilants ODS use in sector (2001): 22 ODP tonnes

Sub-sector cost-effectiveness thresholds: n/a

Project Title:

(a) Sterilization group project to replace CFC-12 technology-based sterilization equipment by alternative technologies in the hospital medical sterilization sector

Project Data	Sterilants
Enterprise consumption (ODP tonnes)	14.47
Project impact (ODP tonnes)	14.47
Project duration (months)	24
Initial amount requested (US \$)	886,600
Final project cost (US \$):	
Incremental capital cost (a)	288,700
Contingency cost (b)	-
Incremental operating cost (c)	-
Total project cost (a+b+c)	288,700
Local ownership (%)	100%
Export component (%)	0%
Amount requested (US \$)	288,700
Cost effectiveness (US \$/kg.)	19.95
Counterpart funding confirmed?	
National coordinating agency	NAFIN
Implementing agency	World Bank

Secretariat's Recommendations	
Amount recommended (US \$)	288,700
Project impact (ODP tonnes)	14.47
Cost effectiveness (US \$/kg)	19.95
Implementing agency support cost (US \$)	21,653
Total cost to Multilateral Fund (US \$)	310,353

PROJECT DESCRIPTION

1. This project will phase out the total remaining consumption of CFC-12 of 14.47 ODP tonnes used together with ethylene oxide (EO) in sterilising machines by 14 hospitals in Mexico. There is currently no regulation in force in Mexico preventing the continued use of CFC-based technology for this purpose. However it is indicated that the remainder of the sub-sector has already converted to alternative gasses or technologies without assistance from the Multilateral Fund. The phase-out will be achieved by replacing the existing equipment with new sterilising machines that use 100 percent ethylene oxide as the sterilising agent. The incremental capital cost requested is US \$886,600, being the estimated cost of 14 new sterilising machines. No incremental operating costs are requested, nor are incremental savings offered. The cost effectiveness as submitted is US \$60.15 per kg. It is indicated that upon implementation of the project, government regulations will be established to prevent the import or the use of CFC-12/EO sterilising machines in Mexico. Companies that provide industrial sterilisation services have already converted and so this project addresses all remaining sterilisation uses in Mexico.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

2. The phase-out in the project will reduce Mexico's remaining fundable consumption from 2,894 ODP tonnes to 2,880 ODP tonnes.

3. Given that Mexico is a large country with a hospital sector of commensurate size, and that there are no regulations preventing the use of CFC-based technology, the Secretariat requested the World Bank to clarify the methodology for establishing that the only remaining use of CFC-12/EO sterilising gas in Mexico was 14.47 ODP tonnes in 14 hospitals, how the phase-out had occurred and what technology had been used in the remainder of the sector.

4. The World Bank indicated that the remaining consumption had been determined through a survey of hospitals in Mexico carried out in 2001 and checked in 2002. In regard to the unfunded phase-out in the remainder of the sector, the World Bank indicated that in many cases the suppliers of the sterilising gas switched their former CFC/EO product to a new gas mixture using 90 percent HCFC and 10 percent EO. Consequently about 90 percent of the sector had switched to the use of HCFC/EO mixtures in their existing equipment. The remainder had installed new equipment to use 100 percent EO gas, which has a lower cost and is fully non-ozone-depleting.

5. The project document indicates that in mid-2002, regulations listing four sterilisation technologies approved for installation in government hospitals in Mexico were promulgated by the Department of Health. The four sterilisation technologies do not include the use of HFCF-blend gasses, but do include 100 percent EO, which is used extensively world-wide. The project document indicates that this is one of the reasons that HCFC technology has not been proposed for the project.

6. The Secretariat discussed with the World Bank the doubtful eligibility of the proposed costs for conversion to 100 percent EO technology, given that than most of the sector had converted by using the HCFC/EO mixture in the existing equipment. The Secretariat also discussed the very high cost of the project as proposed, relative to the phase-out to be realised, and the subsequent cost effectiveness of US \$60.15/kg.

7. At the 35th Meeting the Executive Committee approved a similar project to complete the phase-out of CFC-12 used for sterilisation in hospitals in Chile. That project was based on use of the HCFC/EO sterilising mixture in existing equipment, and had a cost-effectiveness of US \$20.85/kg. The only other sterilisation project, approved for Argentina at the 27th Meeting, had a cost-effectiveness of US \$19.09/kg. Following the discussions with the Secretariat, the World Bank agreed to a re-structuring of the project to calculate the costs on the basis of use of an HCFC/EO mixture in the existing equipment, as for the project in Chile, using the average cost-effectiveness for the sector of US \$19.95/kg, and providing the Government of Mexico with the flexibility to implement the project using the technology of its choice and to meet any additional costs involved. Using this methodology, the incremental cost of the project is US \$288,700.

RECOMMENDATION

8. The project is recommended for blanket approval at the level of funding, including agency support costs of 7.5 percent, indicated in the table below, with the proviso that the Government of Mexico has the flexibility to implement the project using the technology of its choice and to meet any additional costs involved, and that no further funding will be requested for the sterilants sector.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Sterilization group project to replace CFC-12 technology-based sterilization equipment by alternative technologies in the hospital medical sterilization sector	288,700	21,653	World Bank
