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

Nineteenth Meeting
Montreal, 8-10 May 1996

PROJECT PROPOSALS: KENYA

This document includes the Comments and Recommendations from the Fund Secretariat on the following projects:

Aerosol

- Phasing out CFCs at Mirage Industries Ltd.
- Phase out CFCs at Aesthetics Ltd.

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PROJECT EVALUATION SHEET **KENYA**

SECTOR: **AEROSOL** ODS use in sector (1993): 0 ODP tonnes

Sector cost-effectiveness thresholds: US \$4.4/kg

Project Titles:

- (a) Phasing out CFCs at Aesthetics Limited
- (b) Phasing out CFCs at Mirage Industries Ltd.

Project Data	Aerosols	
	Aesthetics Limited	Mirage Industries Ltd.
ODS phase-out (ODP tonnes) ¹	107	51
Proposed project duration (Yrs)	1.5	1.5
Incremental capital cost (US\$)	230,000	201,500
Contingency (%)	10	10
Incremental operational cost (US\$)	(120,000)	(107,000)
Total project cost (US\$)	110,000	94,500
Local ownership (%)	100	100
Export component (%)	0	0
Amount requested (US\$) { Original	194,752	141,627
{ Revised	110,000	94,500
Cost effectiveness (US\$/kg)	1.03	1.85
National Coordinating Agency	Ministry of Environment and Natural Resources	
Implementing Agency	UNIDO	UNIDO
Technical review completed?	Yes	Yes

Secretariat's Recommendations:

Amount recommended (US \$)	110,000	94,500
Project impact (ODP tonnes)	107	51
Cost effectiveness (US \$/kg)	1.03	1.85
Implementing Agency support cost (US \$)	14,300	12,285
Total cost to Multilateral Fund (US \$)	124,300	106,785

¹ Figures for 1994 or average of 1992-1994.

PROJECT DESCRIPTION

1. In 1993, CFC consumption in Kenya, as reported in the country programme was estimated at 47 tonnes used in the foam and refrigeration sectors. The country programme also reported that since February 1993, most aerosol fillers were using butane as propellant.
2. While the two aerosol plants have not used CFC-propellant since 1993, the total CFC consumption reported in the projects is 158 tonnes (107 tonnes at Aesthetics and 51 tonnes at Mirage), used mainly in the production of deodorant, insecticides, and to a lesser extent for degreasing products and silicon spray.
3. UNIDO informed the Secretariat that the two plants switched propellant, from CFC to LPG, without changing or modifying the filling machines, or installing safety equipment. Therefore, UNIDO prepared the projects as if the two plants were still filling with CFCs.
4. The equipment being requested in the two projects include open-air filling systems, propellant handling and filling systems, water baths for testing filled cans, conveyor systems, explosion-proof lighting and ventilation systems, HAP storage and purification systems, and fire control systems. These equipment are needed for the safe use of HAPs.
5. Technical assistance will be provided for performance and supervision of engineering designs, equipment installation and commissioning of the plant, training in production, quality control and safety procedures and production trials.
6. The Secretariat informed UNIDO that safety related equipment might be the only component of the project that is eligible for Multilateral Fund grants.
7. The capital cost of the conversion was revised accordingly and was offset against operating savings. The operating savings (NPV) for four years are US \$120,000 for Aesthetic Limited and US \$107,000 for Mirage Industries.

SECRETARIAT'S RECOMMENDATIONS

1. The Fund Secretariat recommends approval of the projects as follows:

Project	Project Cost US \$	Support Cost US \$	Implementing Agency
Phasing out CFCs at Aesthetics Limited	110,000	14,300	UNIDO
Phasing out CFCs at Mirage Industries	94,500	12,285	UNIDO