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

Twenty-second Meeting
Nairobi, 28-30 May 1997

Corrigendum

PROJECT PROPOSALS: MOROCCO

This corrigendum replaces pages 2, 4, and 5 of document UNEP/OzL.Pro/ExCom/22/45.

**PROJECT EVALUATION SHEET
MOROCCO**

SECTOR: Foams

ODS use in sector (1994): 417 ODP tonnes

Sub-sector cost-effectiveness thresholds:

Slabstock

6.23 US \$/kg

Project Titles:

- (a) Phase out of CFC in the manufacture of flexible foam (Slabstock) at Dolidol
 (b) Phase out of CFC in the manufacture of flexible foam (Slabstock) at Richbond S.A.

Project Data	Slabstock	
	Dolidol	Richbond
ODS phase-out (ODP tonnes)	160	150
Proposed project duration (Yrs)	2	2
Incremental capital cost (US \$)	639,300	632,500
Contingency (%)	10	10
Incremental operational cost (US \$)	(169,600)	(88,000)
Total project cost (US \$)	469,700	544,500
Local ownership (%)	100	100
Export component (%)	0	0
Amount requested (US \$) {Original}	623,000	707,400
{Revised}	475,822	470,625
Cost effectiveness (US \$/kg)	2.97	3.14
National Coordinating Agency	Ozone Protection Unit, National Institute of Ecology (INE)	
Implementing Agency	UNDP	
Technical review completed?	Yes	Yes

Secretariat's Recommendations:		
Amount recommended (US \$)	475,822	470,625
Project impact (ODP tonnes)	160	150
Cost effectiveness (US \$/kg)	2.97	3.14
Implementing Agency support cost (US \$)	61,857	61,181
Total cost to Multilateral Fund (US \$)	537,679	531,806

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. Six projects utilizing the liquid carbon dioxide (LCD) technology - three for Iran, one for Macedonia and two for Morocco have been submitted for approval at this meeting. Although there is evidence that operational savings could be realized through the use of the LCD technology, an appropriate method for calculating such savings has not as yet been established in spite of the on-going efforts of the Secretariat and the implementing agencies to elaborate one. Calculation of incremental operational costs of the six projects based on the methylene chloride methodology and using 50% of the rate of yield losses applicable to methylene chloride projects, showed incremental operational savings range between 16% and 75% (for projects with CFC-11 consumption of 110 tonnes and 280 tonnes respectively) of the capital costs, while calculation using the same parameters as those of methylene chloride technology gave about zero and US \$94,000 operational costs for two companies using 150 and 160 tonnes of CFC-11 respectively.

2. Following discussions of the six projects between the Secretariat and the implementing agencies (UNDP and UNIDO) regarding potential benefits, project implementability and other related issues, it was agreed to consider 25% of the capital cost of each project as incremental operational savings, pending completion of the elaboration by the Secretariat and the implementing agencies of a suitable method for calculating the incremental operational cost/savings.

3. The capital costs of all the six projects were also jointly reviewed by the Fund Secretariat and foam experts from UNDP and UNIDO to ensure uniformity in costing.

4. Thus the following costs were agreed. The license fee of US \$50,000 is not subject to contingency charge.

	Dolidol	Richbond
(i) Cost of equipment	531,300	525,001
(ii) 10% Contingency	53,130	52,500
(iii) License fees	50,000	50,000
(iv) Incremental capital cost	634,430	627,500
(v) Incremental operational savings, ie. 25% of (iv)	(158,607)	(156,875)
(v) Total project cost	475,822	470,625

5. Consequently, the amount of US \$475,822 and US \$470,625 were recommended for approval for Dolidol and Richbond respectively and are reflected in the revised project documents.

Impact of Projects on Meeting the 1999 Freeze

6. No statement on this subject is provided in the project documents.

RECOMMENDATION

1. The Fund Secretariat recommends blanket approval of the projects with the funding levels and associated support costs as indicated below.

<u>Project Title</u>	<u>Project Cost</u> <u>US \$</u>	<u>Support</u> <u>Cost US \$</u>	<u>Implementing</u> <u>Agency</u>
(a) Phase out of CFC in the manufacture of flexible foam (Slabstock) at Dolidol	475,822	61,857	UNDP
(b) Phase out of CFC in the manufacture of flexible foam (Slabstock) at Richbond S.A.	470,625	61,181	UNDP