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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
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PROJECT PROPOSALS: DOMINICAN REPUBLIC

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

Foam

- Phase-out of CFC-11 by conversion to methylene chloride/LIA UNDP technology in the manufacture of flexible polyurethane foam (boxfoam) at Espumas del Cibao
- Phase-out of CFC-11 by conversion to methylene chloride/LIA UNDP technology in the manufacture of flexible polyurethane foam (boxfoam) at Poquinsa
- Phase-out of CFC-11 by conversion to HCFC-141b in the manufacture UNDP of rigid polyurethane foam (panels and sprayfoam) at Paredomi

**PROJECT EVALUATION SHEET
DOMINICAN REPUBLIC**

SECTOR: Foam ODS use in sector (1998): 54.9 ODP tonnes

Sub-sector cost-effectiveness thresholds: Flexible US \$6.23/kg
Rigid US \$7.83/kg

Project Titles:

- (a) Phase-out of CFC-11 by conversion to methylene chloride/LIA technology in the manufacture of flexible polyurethane foam (boxfoam) at Espumas del Cibao
- (b) Phase-out of CFC-11 by conversion to methylene chloride/LIA technology in the manufacture of flexible polyurethane foam (boxfoam) at Poquinsa
- (c) Phase-out of CFC-11 by conversion to HCFC-141b in the manufacture of rigid polyurethane foam (panels and sprayfoam) at Paredomi

Project Data	Flexible slabstock	Flexible slabstock	Rigid
	Cibao	Poquinsa	Paredomi
Enterprise consumption (ODP tonnes)	14.40	4.00	67.00
Project impact (ODP tonnes)	14.40	4.00	60.70
Project duration (months)	36	36	36
Initial amount requested (US \$)	89,540	24,920	177,670
Final project cost (US \$):			
Incremental capital cost (a)	50,000	50,000	50,000
Contingency cost (b)	5,000	5,000	5,000
Incremental operating cost (c)	45,650	12,680	122,670
Total project cost (a+b+c)	100,650	67,680	177,670
Local ownership (%)	100%	100%	100%
Export component (%)	0%	0%	0%
Amount requested (US \$)	89,712	24,920	177,670
Cost effectiveness (US \$/kg.)	6.23	6.23	2.93
Counterpart funding confirmed?	Yes	Yes	
National coordinating agency	Comite Gubernamental de Ozono		
Implementing agency	UNDP	UNDP	UNDP

Secretariat's Recommendations			
Amount recommended (US \$)	89,712	24,920	177,670
Project impact (ODP tonnes)	14.40	4.00	60.70
Cost effectiveness (US \$/kg)	6.23	6.23	2.93
Implementing agency support cost (US \$)	11,663	3,240	23,097
Total cost to Multilateral Fund (US \$)	101,375	28,160	200,767

PROJECT DESCRIPTION

Sector Background

- Latest available total ODS consumption (1997)	614.5 ODP tonnes
- Baseline consumption* of Annex A Group I substances (CFCs)	539.8 ODP tonnes
- 1998 consumption of Annex A Group I substances	311.4 ODP tonnes
- Baseline consumption of CFCs in foam sector	129.7 ODP tonnes
- 1998 consumption of CFCs in foam sector	54.9 ODP tonnes
- Funds approved for investment projects in foam sector as of end of 1998	No projects have been approved in foam sector
- Quantity of CFC to be phased out in foam sector projects as of end of 1998	No projects have been approved in foam sector
- Quantity of CFC phased out in foam sector projects as of end of 1998	No projects have been approved in foam sector

*Baseline consumption of Annex A controlled substances refers to average of the consumption for the years 1995-1997 inclusive.

1. Although CFC consumption in the foam sector in 1998 was reported to be 54.9 ODP tonnes, the total CFC consumption of the enterprises for 1998 reported in the three projects is 85.4 ODP tonnes. Thus the sector consumption of CFCs in 1998 is exceeded by consumption reported in the projects by 55.6 per cent.

Flexible Slabstock Foam

2. Espumas Del Cibao and Poquinsa used 14.4 and 4.0 tonnes/year respectively of CFC-11 (1998) in the manufacture of discontinuous flexible polyurethane foam (boxfoam). The production at the two companies is to be converted to methylene chloride, supplemented by additives as necessary. The projects include optimized ventilation at (US \$30,000), trials (US \$10,000), technology transfer and training (US \$10,000), and contingency (US \$5,000). The incremental operating costs for four years are US \$34,540.

3. Paredomi used of 67 tonnes/year CFC-11 (1998) in the manufacture of rigid polyurethane foam for panels and sprayfoam applications. The production is to be converted to HCFC-141b as an interim step for both the panel filling and the spray foam applications, with a likely permanent solution being water based formulations. The company will retrofit two of the four dispensers for the panel operation at US \$10,000 each and two sprayfoam dispensers also at US \$10,000 each for use with HCFC-141b. Other costs include trials (US \$10,000), technology transfer and training (US \$20,000) and incremental operating costs (US \$122,670).

Justification for the use of HCFC-141b

4. Justification for the use of HCFC-141b by Paredomi has been provided by UNDP together with a letter from the Government of Dominican Republic confirming the need for the company to use the substitute.

Impact of the Projects

5. The two flexible slabstock and one rigid foam project will eliminate 79.1 tonnes of CFC-11 when implemented. This represents 12.9 per cent of Dominican Republic's baseline consumption of Annex A Group I substances and 61 per cent of the baseline consumption in the foam sector. There is a residual ODP of 6.30 ODP tonnes as a result of the use of HCFC-141b.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS**COMMENTS**

1. The Fund Secretariat and UNDP have discussed and agreed on the costs of the projects.

RECOMMENDATIONS

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

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Phase-out of CFC-11 by conversion to methylene chloride/LIA technology in the manufacture of flexible polyurethane foam (boxfoam) at Espumas del Cibao	89,712	11,663	UNDP
(b)	Phase-out of CFC-11 by conversion to methylene chloride/LIA technology in the manufacture of flexible polyurethane foam (boxfoam) at Poquinsa	24,920	3,240	UNDP
(c)	Phase-out of CFC-11 by conversion to HCFC-141b in the manufacture of rigid polyurethane foam (panels and sprayfoam) at Paredomi	177,670	23,097	UNDP