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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
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PROJECT PROPOSAL: TRINIDAD AND TOBAGO

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

Aerosol

- Project to phaseout use of CFCs in aerosol filling at Hand Arnold Industries Limited (HAIL) UNDP

PROJECT EVALUATION SHEET **TRINIDAD & TOBAGO**

SECTOR: AEROSOL ODS use in sector (1997): 20 ODP tonnes

Sub-sector cost-effectiveness thresholds: Aerosol 4.40 US \$/kg

Project Title:

Hand Arnold Industries Limited (HAIL) - project to phaseout use of CFCs in aerosol filling

Project Data	Hydrocarbons
	Hand Arnold Industries
ODS phase-out (ODP tonnes)	18
Proposed project duration (months)	24
Incremental capital cost (US \$)	119,570
- including contingency (%)	-
Incremental operational cost (US \$)	n/a
Total project cost (US \$)	119,570
Local ownership (%)	100
Export component (%)	-
Amount requested (US \$) {Original}	158,021
{Revised}	119,570
Cost effectiveness (US \$/kg)	8.78
National Coordinating Agency	EMA (Environmental Management Authority)
Implementing Agency	UNDP
Technical review completed?	Yes
<i>Secretariat's Recommendations:</i>	
Amount recommended (US \$)	119,570
Project impact (ODP tonnes)	18
Cost effectiveness (US \$/kg)	6.64
Implementing Agency support cost (US \$)	15,544
Total cost to Multilateral Fund (US \$)	135,114

PROJECT DESCRIPTION

Hand Arnold Industries Limited (HAIL) - project to phaseout use of CFCs in aerosol filling

1. Only two of the eight aerosol fillers in Trinidad and Tobago manufacturing aerosol products (cosmetics and insecticides) are using CFCs as a propellant. The total consumption is estimated at 20 tonnes. These fillers are Hand Arnold Industries Ltd (HAIL's, 18 tonnes) and Caribbean A&C Ltd (2 tonnes).
2. The project is for the replacement of CFC-11, CFC-12 and CFC-114 with hydrocarbon propellant used in manufacturing different types and sizes of deodorants and perfumed sprays (an average of 500,000 cans/year over the last three years). HAIL's main business has been contract manufacturing for international brands; during recent years it has lost some of its clients, since many of them have taken a policy decision to phase out CFCs from their products.
3. UNDP indicated that the project will assist the Government of Trinidad and Tobago to meet the 1999 freeze. While project completion is estimated to take two years, the technical part of the conversion will be completed in 18 months, and consequently this project will assist the country to meet the freeze target.
4. The aerosol filling process under operation utilises two manual filling machines manufactured by Aerofill (purchased in 1991 and 1986), with a total capacity of 2.5 million cans/year. Conversion entails installation of a gassing unit operating under an open-air filling room with a propellant handling system and transfer pumps, manual water bath for testing filled cans, HAP storage system, gas detectors and fire control system. The existing product filling, crimping and gassing units will be retrofitted for handling HAPs safely and moved to a new production area. Technical assistance will be provided for equipment installation and commissioning of the plant, and plant safety training.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The project proposes to replace the existing manual aerosol filling production lines by modular hydrocarbon units with a total filling capacity 2.5 million cans/year. However, the current production of the plant is 0.5 million (average of the last three years). Based on discussions between the Fund Secretariat and UNDP regarding this issue, it was agreed to review the project in order to provide only for essential equipment associated with the conversion, including safety related costs, on the basis of the current production levels. The budget cost was subsequently reduced by US \$75,000.
2. Operational savings were not considered in the calculations of the incremental costs since the plant operates as contract filler (the Secretariat requested UNDP for an official confirmation from the Government that the plant operates as contract filler).
3. The cost effectiveness of the project is US \$6.6/kg, compared with the established value for this sector of US \$4.4/kg. However, Trinidad and Tobago is a low-volume consuming country (consumption of 101.6 ODP tonnes in 1996 as reported to the Ozone Secretariat).

RECOMMENDATION

1. Taking into consideration that the equipment requested in the project proposal is essential for the conversion, that HAIL's enterprise is a contract filler, and that Trinidad and Tobago is a LVC country, the Fund Secretariat recommends blanket approval of the project with associated support cost at the funding level indicated below:

Project Title	Project Cost US \$	Support Cost US \$	Implementing Agency
Hand Arnold Industries Limited (HAIL) - project to phaseout use of CFCs in aerosol filling	119,570	15,544	UNDP