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

Seventeenth Meeting
Montreal, 26-28 July 1995

PROJECT PROPOSALS: INDONESIA

This document includes the Comments and Recommendations from the Fund Secretariat.

PROJECT EVALUATION SHEET

COUNTRY OR REGION:	Indonesia
PROJECT TITLE:	a) FIBRINDO-elimination of CFCs in the manufacture of rigid PUR foam for cold storage b) Perdana/Merah - elimination of CFCs in the manufacture of rigid polyurethane foam for coolers/thermoware.
BUDGET:	a) Capital costs: US $55,000 Operating Costs: US $0 b) Capital costs: US $170,000 Operating Costs: US $ 23,000
INCREMENTAL COSTS:	a) US $55,000 b) US 193,000
ODS PHASE-OUT:	a) 11 MT b) 27 MT
COST EFFECTIVENESS[1]:	a) US $ per kg. ODP saved b) US $ per kg. ODP saved
PROJECT DURATION	a) One year b) One year
IMPLEMENTING AGENCY:	UNDP
NATIONAL COORDINATING AGENCY:	Indonesian Ministry of Environment (LH)
TECHNICAL REVIEW COMPLETED:	YES _X_ NO ____

SECRETARIAT'S COMMENTS

1. This project evaluation sheet covers two foam projects in Indonesia (Fibrindo and Perdana/Merah). Perdana/Merah comprises two foam enterprises. Both companies produce rigid

[1] Determined as the ratio of incremental costs to the estimated annual saving of ODP ($/ODPkg).
For CFC-11, ODS=ODP.

polyurethane foam products for various end-uses, including insulation of truck boxes and thermoware.

2. Fibrindo will phase out CFC-11 through the use of HCFC-141b initially and will later consider all water blown technology. In consonance with the level of operations, Fibrindo will be provided with a spray foam type foam dispenser with a pouring applicator at a relatively low cost. Measures will also be put in place to avoid high material losses experienced with the current technology. The increase in efficiency with the new technology was taken into account in calculating the incremental operating costs.

3. Perdana/Merah will phase-out CFC-11 by the use of all water blown technology. The capital cost of phase out relates to the replacement of a low pressure foam dispenser with a high pressure one. The current manual blending process results in estimated 20 per cent losses. These losses have been taken into account in the calculation of operational costs. Some capital cost items were adjusted in line with normal practice for similar projects. The projects' cost-effectiveness are within the threshold for the sub-sector.

SECRETARIAT'S RECOMMENDATIONS

4. The Secretariat recommends approval of the two projects at the following levels of funding:

	Project Grant	UNDP Support Costs
Fibrindo	US $55,000	US $7,150
Perdana/Merah	US $173,000	US $22,490