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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-third Meeting
Montreal, 12-14 November 1997

PROJECT PROPOSAL: BAHAMAS

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

Refrigerant Management Plan

- Training the trainers of technicians in the refrigeration sector
- Training in monitoring and controlling of ODSs
- National recovery and recycling programme

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PROJECT EVALUATION SHEET **BAHAMAS**

SECTOR: REFRIGERATION ODS use in sector (1994): 70.1 ODP tonnes

Sub-sector cost-effectiveness thresholds: RMP N/A

Project Title: Refrigerant Management Plan

Project Data	REFRIGERATION MANAGEMENT PLAN	
ODS phase-out (ODP tonnes)		12.64
Proposed project duration (months)		36
Incremental capital cost (US \$)		227,900
- including contingency (%)		10
Incremental operational cost (US \$)		
Total project cost (US \$)		227,900
Local ownership (%)		N/A
Export component (%)		N/A
Amount requested (US \$) {Original}		227,900
{Revised}		
Cost effectiveness (US \$/kg)		N/A
National Coordinating Agency	Ozone Unit, Ministry of Health and the Environment	
Implementing Agency	UNDP, UNEP	
Technical review completed?		N/A

<i>Secretariat's Recommendations:</i>		
Amount recommended (US \$)		236,400
Project impact (ODP tonnes)		12.64
Cost effectiveness (US \$/kg)		N/A
Implementing Agency support cost (US \$)		30,732
Total cost to Multilateral Fund (US \$)		267,132

PROJECT DESCRIPTION

Refrigerant Management Plan

1. The Government of Bahamas is submitting for consideration by the Committee at its 23rd Meeting a request for implementation of a refrigerant management plan.
2. Based on information gathered during the preparation of the country programme in 1994, total ODS consumption in the country was estimated at 70.1 tonnes and it was used in the refrigeration and air-conditioning sector.
3. During the preparation of the RMP, the Ozone Unit and a national consultant under the supervision of a UNDP Consultant conducted two fact finding missions to Bahamas. During the course of these missions, interviews were held with major importers and distributors of refrigerants, principle refrigeration and air conditioning equipment suppliers, service workshops and firms and organizations that maintain their own facilities, to explain and discuss the proposed RMP and to compile relevant information concerning the importation, distribution and consumption of refrigerants in the country.
4. There are over 300 service technicians in Bahamas. While most of the technicians would have received formal training at the Industrial Training Center, there are several self-taught entrepreneurs known to operate, especially in the field of vehicle air-conditioning. Further training is often limited to "experience" or on-the-job demonstrations.
5. The Government's Action Plan proposes to develop and implement specific control measures including, inter alia, setting of import quotas and issuing of licenses; legislative framework for ODS phase-out; ban on new installations using ODSs and/or equipment containing ODSs; import concessions and tax incentives to promote use of alternative substitutes and technologies; training of refrigeration and air-conditioning service technicians as well as the implementation of a national programme for recovery and recycling of refrigerants.
6. The RMP identified two basic training programmes, namely, training for monitoring and controlling of ozone depleting substances, aimed at Customs and Bureau of Statistics, to identify and develop techniques for collecting and reporting consumption of import data; and training for refrigeration technicians in good management practices using the "train the trainers" approach. This programme aims at improving service and maintenance practices in order to prevent intentional and/or unintentional release of ODS into the atmosphere, thus making it possible for refrigeration equipment to operate to the end of its useful life.
7. The RMP also includes a subproject for the establishment of a recovery and recycling network comprising 50 recovery units and two recycling centres (one in Nassau, New Providence Island and another in Freeport, Grand Bahamas Island) for servicing commercial and industrial refrigeration equipment, at a cost of US \$151,400 (the MAC sector is not covered). This activity

also provides for a one-day workshops for service technicians on practical demonstration on recovery and recycling equipment. The two recycling centers will accept for treatment any CFC-12 recovered by any company or workshop based in Bahamas.

8. This project is part of an overall strategy by the Government of Bahamas for the refrigeration and air conditioning sector. The first priorities are to stop the discharge of CFCs into the atmosphere, due to leaks and servicing emissions, and to recover CFCs from existing installations during maintenance and prior to retrofits or dismantlement.

9. Implementation of these projects will lead to a recovery and recycling of 12.64 tonnes of CFC each year. This amount does not take into account the amount of refrigerant that might be saved owing to the teaching of good service and maintenance practices at the training seminars.

10. The Ozone Unit will be responsible for the monitoring, co-ordination and successful implementation of proposed phase-out activities in the RMP. It will allocate and distribute the equipment and monitor the quantity of refrigerants being recovered and recycled; and maintain a database to monitor the information received from service and recycling centres.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

1. The Executive Committee at its 22nd Meeting decided to request UNEP, in consultation with the Secretariat, the other implementing agencies and members of the Executive Committee, to review the proposed guidelines for RMPs and submit them to the September 1997 meeting of the Sub-Committee on Project Review (Decision 22/24). The Sub-Committee, at its September Meeting, welcomed the revised draft guidelines and provided further guidance on work to be done. Based on discussion at the Sub-Committee's meeting, UNEP IE revised the RMP guidelines for submission to the 23rd Meeting of the Executive Committee.

2. The Bahamas RMP follows the RMP guidelines as revised by UNEP.

3. Bearing in mind the importance of the RMP as one of the few activities that could assist the Government of Bahamas to meet its obligations under the Montreal Protocol, the Secretariat and UNDP discussed in detail the major components of the RMP, in particular, the timing of implementation of regulatory and legislative requirements, the fiscal steps to make recovery and recycling economically feasible, and modalities for the implementation of the training programme in good management practices in order to cover the majority of the service technicians operating in the country.

4. The Secretariat and UNDP also discussed the size of the recovery and recycling programme in relation to CFC consumption level and its sectoral distribution as compared to other recovery and recycling projects already approved.

5. UNDP informed the Secretariat that the Government of the United States, jointly with UNDP, is preparing a project to reduce CFC consumption in the MAC sector, which will be integrated in the RMP.

6. The Secretariat and UNDP discussed the modalities of coordination and implementation of the various activities in the RMP, the monitoring and evaluation roles of the Ozone Unit, the responsibilities of government agencies and industrial associations during implementation of the RMP as well as the Government's commitment to its implementation.

RECOMMENDATIONS

1. The Fund Secretariat recommends blanket approval of the project with associated support costs at the funding level shown in the table below:

Project Title	Project Cost US \$	Support Cost US \$	Implementing Agency
Refrigerant Management Plan:			
a) Training the trainers of technicians in the refrigeration sector	30,000	3,900	UNEP
b) Training in monitoring and controlling of ozone depleting substances	55,000	7,150	UNEP
c) National recovery and recycling programme	151,400	19,682	UNDP

2. To request UNEP and UNDP not to proceed with the disbursement of funds approved for the training programmes and the recovery and recycling programme until the regulatory and legislative requirements and fiscal steps proposed by the Government of Bahamas are put into place.