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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Forty-fifth Meeting
Montreal, 4-8 April 2005

PROJECT PROPOSALS: NICARAGUA

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposals:

Refrigeration

- Refrigerant management plan update: incentives programme to promote good practices in refrigeration UNDP
- Refrigerant management plan update: licensing and certification system for refrigeration technicians UNEP
- Refrigerant management plan update: programme for prevention of illegal CFC trade UNEP
- Refrigerant management plan update: programme for monitoring and control of RMP UNEP

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**PROJECT EVALUATION SHEET – NON-MULTI-YEAR PROJECTS
NICARAGUA**

PROJECT TITLES**BILATERAL/IMPLEMENTING AGENCY**

(a)	Refrigerant management plan update: incentives programme to promote good practices in refrigeration	UNDP
(b)	Refrigerant management plan update: licensing and certification system for refrigeration technicians	UNEP
(c)	Refrigerant management plan update: programme for prevention of illegal CFC trade	UNEP
(d)	Refrigerant management plan update: programme for monitoring and control of RMP	UNEP

NATIONAL CO-ORDINATING AGENCY	Oficina Tecnica del Ozono (OTO), MARENA
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LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT**A: ARTICLE-7 DATA (ODP TONNES, 2003, AS OF JANUARY 2005)**

Annex A Group I CFCs	29.85		
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B: COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES, 2003, AS OF MAY 2004)

ODS Name	Sub-sector/quantity	Sub-sector/quantity	Sub-sector/quantity	Sub-sector/quantity.
CFC-11	Ref. servicing: 2.75			
CFC-12	Ref. servicing: 27.10			

CFC consumption remaining eligible for funding (ODP tonnes)	60.40
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CURRENT YEAR DRAFT BUSINESS PLAN ALLOCATIONS		Funding US \$	Phase-out ODP tonnes
(a) – (d)		396,800	18.2

PROJECT TITLE:	(a)	(b)	(c)	(d)
ODS use at enterprise (ODP tonnes):			29.85	
ODS to be phased out (ODP tonnes):			*	
ODS to be phased in (ODP tonnes):			n/a	
Project duration (months):			36	
Initial amount requested (US \$):	104,000	103,000	34,000	54,000
Final project cost:				
Incremental Capital Cost (US \$)				
Contingency (10%) (US \$)				
Incremental Operating Cost (US \$)				
Total Project Cost (US \$)	85,000	40,000	15,000	30,000
Local ownership (%):			100	
Export component (%):			0	
Requested grant (US \$):	85,000	40,000	15,000	30,000
Cost-effectiveness (US \$/kg):			n/a	
Implementing agency support cost (US \$):	7,650	5,200	1,950	3,900
Total cost of project to Multilateral Fund (US \$):	92,650	45,200	16,950	33,900
Status of counterpart funding (Y/N):			Y	
Project monitoring milestones included (Y/N):			Y	

SECRETARIAT'S RECOMMENDATION	Approval at the costs indicated above
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* To be in compliance with the 2005 and 2007 Montreal Protocol limits (CFC baseline is 82.8 ODP tonnes)

PROJECT DESCRIPTION

Background

1. The Government of Nicaragua has submitted for consideration by the Executive Committee at its 45th Meeting a project proposal for a refrigerant management plan (RMP) update at a cost of US \$295,000.
2. Since the implementation of the Nicaraguan country programme began, CFC consumption has decreased from 55.7 ODP tonnes in 1997 to 29.9 ODP tonnes in 2003. The projects approved so far under the Multilateral Fund have accounted for a direct reduction in consumption of 22.3 ODP tonnes of CFCs.
3. The CFC baseline for Nicaragua is 82.8 ODP tonnes. Therefore, Nicaragua will need to phase-out 17.5 ODP tonnes of CFCs in order to achieve the 2007 consumption limit.

Servicing sector

4. Total CFC consumption identified through the survey conducted for the preparation of the RMP update is 48.4 tonnes of CFCs, namely CFC-12 (46.5 ODP tonnes), CFC-11 and CFC-115 (1.9 ODP tonnes). The distribution of CFCs among the different refrigeration sub-sectors is as follows: 26.5 ODP tonnes in domestic refrigeration; 6.7 ODP tonnes in commercial refrigeration; 2.3 ODP tonnes in industrial refrigeration; and 12.9 ODP tonnes in mobile air conditioning (MAC).
5. The refrigeration servicing sector consists of approximately 600 service workshops, of which 240 are registered, and the remaining 360 are informal workshops located mostly in garages or private homes. There are approximately 2,000 technicians working in the refrigeration sector, out of which an estimated 1,800 work in the registered workshops. The rest of the technicians work independently, without an established workshop. It is also estimated that only 50 per cent of technicians have a formal education, while the rest have learned empirically.
6. In the last two years, the prices of CFC and non-CFC refrigerants have increased sharply. The 2004 prices of refrigerants per kg are: US \$8.28 for CFC-11; US \$7.10 for CFC-12; US \$7.52 for HCFC-22; and US \$9.37 for HFC134a. These prices vary greatly according to the size of the container.

Legal framework

7. The main element of the legal framework that supports all of the Government's initiatives to implement the Montreal Protocol in the country is Executive Decree 91-2000, which contains ODS regulations. The ODS regulations include the creation of a registry of ODS importers and exporters; the obligation to register and obtain authorization for import and export of ODS; a ban on imports of new or second-hand CFC-based refrigeration equipment including MAC units; the establishment of a schedule for the phase-out of ODS with specific import quotas; and the mandatory identification and labelling of ODS.

Projects previously approved

8. So far, the Executive Committee has approved total funding of US \$340,430 in projects for the refrigeration servicing sector in Nicaragua (including US \$60,000 for project preparation). Specifically:

- (a) A regional Central America MAC servicing demonstration project for El Salvador, Honduras, Nicaragua and Panama (US \$55,000 estimated funds allocated to Nicaragua). A workshop for 10 technicians and 2 trainers was carried out and 10 MAC recovery and recycling machines were distributed. This project has been completed; and
- (b) The implementation of the RMP (US \$225,430) with the following sub-project components:
 - (i) Assistance in the design of policies and regulations;
 - (ii) Training programme on good servicing practices and recovery and recycling. A workshop for 20 trainers has been carried out and 3 additional workshops are being planned in 2005. The recovery and recycling equipment has already been received in the country and is scheduled to be handed over to beneficiaries in 2005;
 - (iii) Training programme for customs officers. Two workshops for 40 customs officers have been carried out and one additional workshop is being planned for 2005.

Compliance strategy and action plan

9. The Government of Nicaragua proposes a compliance strategy based on the following four main elements:

- (a) Strengthening of the legal framework in order to reinforce all aspects of the ongoing ODS phase-out programme;
- (b) Strengthening awareness among the major CFC users and the public in general, in order to promote reduction of CFC consumption;
- (c) Assistance to the end-user sector to promote the reduction of CFC use; and
- (d) Permanent monitoring of ongoing initiatives and of compliance with the legal framework to ensure the compliance strategy's success.

10. The compliance strategy is supported by an action plan which consists of the following specific projects and activities:

- (a) An incentive programme to promote good practices in refrigeration

(US \$104,000). This project will equip servicing workshops with the basic tools needed to implement good servicing practices, enabling the workshops to use CFCs more efficiently and thus reduce their consumption.

- (b) A licensing and certification system for refrigeration technicians (US \$103,000). This project will establish a certification system for technicians to make the use of good practices mandatory;
- (c) A programme for the prevention of illegal CFC trade (US \$34,000). This project will include high-level meetings with Customs authorities to build commitment and formalize cooperation agreements; the creation of an information clearinghouse on the prevention of illegal CFC trade within the Customs structure; and periodic meetings with Customs staff to strengthen the control of illegal CFC trade;
- (d) An RMP monitoring and control programme (US \$54,000). This project will establish a permanent system to monitor ongoing initiatives as well as compliance with the related legal framework, in order to detect any problems in a timely manner and apply corrective measures, thus ensuring the success of the compliance strategy.

11. The following two additional activities, not funded through the Multilateral Fund, are also proposed:

- (a) A programme for strengthening the legal framework to reinforce all ongoing initiatives; and
- (b) Reinforcement of the public awareness programme being carried out by the Government, by continuing to provide information to the general public and the different CFC users on their respective roles in the phase-out of CFCs.

Cost of the RMP update

12. The cost of the proposed RMP update is US \$295,000. The volume of CFCs to be phased out through the implementation of the RMP update has been estimated at 15.43 ODP tonnes.

13. The Government of Nicaragua submitted the RMP update with a transmittal letter signed by the Minister of the Environment and Natural Resources, committing to achieve the 2005 and 2007 allowable control limits of CFCs, without seeking any additional assistance from the Multilateral Fund.

Lead agency and cooperating agency

14. The Government of Nicaragua has selected UNEP as the lead implementing agency and UNDP as the cooperating agency for the RMP update. Apart from the projects falling specifically under the direct responsibility of each agency, UNEP will be responsible for helping the Government of Nicaragua to prevent illegal CFC trade and ensure compliance with the CFC

import quotas and other related regulations, such as the ban on imports of CFC-based equipment. UNEP will also be responsible for monitoring and reporting the results of all the projects within the RMP, and signaling any problems in order to facilitate early corrective actions. Both UNEP and UNDP will assist the Government of Nicaragua in promoting the use of good practices in the refrigeration sector and reducing the use of virgin CFCs.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

CFC consumption

15. The Government of Nicaragua reported to the Ozone Secretariat (under Article 7 of the Protocol) a CFC consumption of 29.8 ODP tonnes in 2003. However, according to the RMP update, the 2003 CFC consumption in Nicaragua was 48.4 ODP tonnes. On this basis, the Government of Nicaragua is considering the submission of a report to the Fund and Ozone Secretariats requesting a change in the CFC consumption level reported for 2003. In this regard, the Secretariat asked UNDP and UNEP when the updated report would be submitted to the Fund and Ozone Secretariats, noting that if the 2003 CFC consumption is officially modified, the RMP project would have to be updated accordingly. Subsequently, UNDP and UNEP reported that the Government of Nicaragua was still carrying out detailed verifications of the customs records and could not foresee an exact date for submission of the new CFC consumption data. This review is taking longer than expected because of the new customs personnel involved in this task. Once the CFC consumption level is made official, the Government will carry out the corresponding modifications to the RMP. However, for all practical purposes concerning the implementation of the RMP, the Government will use the consumption gathered through the surveys.

16. The RMP update reports the potential risk of re-exporting CFC-12 to neighbouring countries where it is more expensive (i.e., US \$12/kg in Guatemala, US \$10/kg in El Salvador, and US \$9/kg in Honduras compared to US \$7/kg in Nicaragua). Upon a request by the Secretariat for additional information, UNDP and UNEP pointed out that there is no tangible indication that CFC re-exports are actually occurring. The main reason for the threat of CFC re-exportation is the difference between the local price of CFC and CFC prices in the rest of the region. This regional structure for the prices of CFCs is expected to continue unchanged, since it is due to a marketing strategy linked to the lower purchasing power in the country. The Government of Nicaragua is aware of this situation and is proposing a programme within the RMP update for the prevention of illicit CFC trade to tackle the issue of CFC re-exports.

17. The Secretariat also pointed out that, currently, all CFC consumed in Nicaragua is imported from Mexico. According to the agreement between the Government of Mexico and the Executive Committee for the closure of the CFC production plant, Mexico will cease production of CFCs by the end of 2005. The issue of CFC supply in Nicaragua during the 2006-2010 period was not addressed in the RMP project. Subsequently, UNDP and UNEP indicated that the CFC importers in Nicaragua are aware of the imminent closure of Mexico's production facilities and are starting business with other suppliers, such as China. In spite of this, the Government of

Nicaragua has considered very favourably the idea of holding meetings on the issue with major stakeholders, as well as training refrigeration technicians on drop-in replacements.

Customs department and Ozone Unit

18. It is reported that the customs department in Nicaragua was completely reorganized in 2004. Consequently, the coordination between the Ozone Unit and the Customs Department had to be re-established. On this issue, UNDP and UNEP informed the Secretariat that co-ordination between the Ozone Unit and the Customs Department has already been successfully established, although there is still an ongoing need to train the new personnel that process the information for the Ozone Office. Furthermore, the proposed programme for prevention of illicit CFC trade will take this co-ordination to a higher level, with the purpose of raising the priority of ODS issues within the Customs Department. The customs officers that received the first training on ODS issues within the original RMP were, in turn, the trainers for the following courses, and are available for any future related activities.

Cost of the RMP update

19. The total funding so far approved for Nicaragua in the refrigeration servicing sector amounts to US \$340,000. As per Decision 31/48, the total maximum funding for the RMP update for Nicaragua would be US \$170,000 (at 50 per cent of the total amount previously approved).

20. From the review of the RMP update, the Secretariat also noted that:

- (a) The existing licensing system is not fully operational. The RMP update is proposing a change of the phase-out schedule;
- (b) At least three additional training programmes for refrigeration servicing technicians have yet to be conducted from the original RMP;
- (c) CFCs have only been imported from Mexico, and the production of CFCs in Mexico will cease by the end of 2005. Moreover, the price of CFC-12 in Nicaragua is much lower than in the neighbouring countries. Under these circumstances, the risks of illegal trade in CFCs in Nicaragua are limited;
- (d) Recovery and recycling practices have not commenced, since the equipment procured by the original RMP project has not been distributed; and
- (e) The issue associated with the closure of CFC production in Mexico was not fully addressed in the preparation of the RMP update.

21. Under the above circumstances, the Secretariat suggested that UNDP and UNEP examine the merits of providing all necessary support to the Government of Nicaragua to enable it to strengthen its current licensing system for controlling imports of all ODS and CFC-based equipment, and to establish a procedure to favour the importation of non-CFC drop-in refrigerants, including training of refrigeration service technicians in the use of drop-ins. Without

an operational licensing system and a mechanism to facilitate the introduction of drop-in refrigerants, Nicaragua may not be able to achieve the 2005 and 2007 CFC consumption limits.

22. Subsequently, UNDP and UNEP agreed to revised the RMP update project and revised the project budget accordingly. The revised RMP update consists of the following sub-projects:

- (a) Incentive programme to promote good practices in refrigeration (US \$85,000);
- (b) Licensing and certification system for refrigeration technicians (US \$40,000);
- (c) Programme for prevention of illegal CFC trade (US \$15,000); and
- (d) RMP monitoring and control programme (US \$30,000).

RECOMMENDATION

23. The Fund Secretariat recommends blanket approval of the projects with associated support costs at the funding levels shown in the table below.

	Project Title	Project Funding (US\$)	Support Cost (US\$)	Implementing Agency
(a)	Refrigerant management plan update: incentives programme to promote good practices in refrigeration	85,000	7,650	UNDP
(b)	Refrigerant management plan update: licensing and certification system for refrigeration technicians	40,000	5,200	UNEP
(c)	Refrigerant management plan update: programme for prevention of illegal CFC trade	15,000	1,950	UNEP
(d)	Refrigerant management plan update: programme for monitoring and control of RMP	30,000	3,900	UNEP
