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执行蒙特利尔议定书
多边基金执行委员会
第四十四次会议
2004年11月29日至12月3日，布拉格

项目提案：巴哈马

本文件包括基金秘书处有关以下项目提案的评论和建议：

淘汰

- 结束性淘汰管理计划：2004-2005 年度方案

世界银行

项目评价表——多年期项目

国家：巴哈马

项目名称

执行机构

结束性淘汰管理计划： 2004-2005 年度方案	世界银行
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国家协调机构：	巴哈马环境、科学与技术委员会
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当年业务计划：未包括在内

项目数据	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	总计**	
氟氯化碳 (ODP 吨)	蒙特利尔议定书限额	64.9	64.9	64.9	64.9	32.45	32.45	9.735	9.735	9.735	0	66
	依照第7条报告的数据	63	55	24.6	不适用	不适用	不适用	不适用	不适用	不适用	不适用	
	依照本协定报告的数据	不适用	29.88	29.62	不适用	不适用	不适用	不适用	不适用	不适用	不适用	
	依照本协定的年度消费限量	66	58	48	36	25	14	0	0	0	0	66
	新解决的年度淘汰量	不适用	8	10	12	11	11	14	0	0	0	66
总共将淘汰的消耗臭氧层物质消费	不适用	8	10	12	11	11	14	0	0	0	66	
原则上核准的项目费用（美元）（多年期协定）												
世界银行的资金	240,000		200,000		120,000							560,000
世界银行支助费用	31,200		26,000		15,600							72,800
项目向多边基金申请的总费用（美元）	271,200		226,000		135,600							632,800
原核准/申请项目费用（美元）：												
世界银行的资金	240,000			200,000	不适用							不适用
世界银行支助费用	31,200			26,000	不适用							不适用
项目向多边基金申请的总费用（美元）	271,200			226,000	不适用							不适用
项目最终成本效益值 （美元/公斤）											8.23 美元/公斤 ODP	

(**) 总计包括自2001年至2009年的消费与淘汰。

供资申请：核准2004/2005两年期行动方案第一期供资和推迟的第二期支助费用

秘书处建议	供单独审议
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项目说明

1. 世界银行代表巴哈马政府已向执行委员会第四十四次会议提交了巴哈马结束性淘汰管理计划 (TPMP) 第二期供资的申请。申请附有 2004-2005 两年期行动方案以及 2001-2003 年进度报告。巴哈马的氟氯化碳基准消费量为 64.90 ODP 吨。
2. 巴哈马结束性氟氯化碳淘汰管理计划协定最初在 2001 年执行委员会第三十五次会议上核准，相关供资数额为 560,000 美元。通过此计划，为实现从 2000 年 66 ODP 吨到 2007 年年底之前完全淘汰消耗臭氧层物质消费，巴哈马政府申请了技术援助。结束性淘汰管理计划预计了三期供资，第一期于核准时获得，之后每两年一次，直至 2005 年。由于 2002 年选举后政府领导层变更所导致的推迟执行结束性淘汰管理计划，世界银行只在 2004 年提交了供资申请。
3. 根据巴哈马依据《蒙特利尔议定书》第 7 条报告的数据，以及世界银行报告的数据，巴哈马已实现了以上 2002 年与 2003 年协定中规定的定量削减目标。
4. 与申请一道提交的 2004 年与 2005 年两年期方案预计了若干活动。这包括允许建立官方限制进口消耗臭氧层物质的受控物质法案。其他活动包括进口配额介绍、向他国出口氟氯化碳归档系统的执行，以及对制冷行业进行评估。
5. 世界银行依照 2002-2003 两年期方案的进口修复与循环设备还未被发送，因为还未确定特定需求。在制冷协会的协助下，氟氯化碳循环与修复方案将于 2005 年启动。从 2005 年开始，培训将分散化。将提供额外培训设备以便继续对制冷技术人员进行培训。将推广政府赞助的认证方案，通过制冷培训课程的技术人员将由此获得证书。将对当地报关代理机构、消防部门，以及巴哈马皇家警卫队实施最新培训方案。将继续执行提高公众认识方案。

秘书处评论和建议

评论

6. 巴哈马结束性氟氯化碳淘汰管理计划指出了每一年的消费目标。在协定中，巴哈马政府特别同意确保对淘汰进行准确的监测。政府还同意依照《蒙特利尔议定书》及本协定提供定期报告。协定指出，据此提供的消费数字将与巴哈马依照第 7 条递交臭氧秘书处的报告保持一致。
7. 基于臭氧办公室与行业间的自愿协定正在进行消费报告及其核查，并与海关部门数据库进行一致性核对。虽然海关部门有专门用于消耗臭氧层物质的代码，但据世界银行称，因以往进口记录中不断出现错误故造成了对海关部门数字可靠性的怀疑。世界银行因此认为，基于行业自愿协定而获得的数据较海关部门数据更为可靠。世界银行表示，如果有需

求的话，已计划于 2005 年及以后进行额外海关培训课程，以解决这一问题。

8. 已经为进口消耗臭氧层物质制定了许可证制度，但还未到位。项目文件预计于 2001 年签订消耗臭氧层物质进口调控系统。世界银行在答复秘书处时表示，此立法生效的可能日期应为 2004 年年底。

9. 下表显示了巴哈马依照《蒙特利尔议定书》第 7 条在过去两年中报告的数据，以及世界银行作为依照本协定进行报告所提供的数据：

年度	2002 年 [ODP 吨]	2003 年 [ODP 吨]
根据结束性淘汰管理计划，最大允许附件 A 第一类消费	58.00	48.00
依照第 7 条报告的数据	55.00	24.60
世界银行报告的数据；2003 年已核查	29.88	29.62

10. 对于这两年的报告而言，尽管两份报告均未超出两年的最大允许消费，但世界银行报告的数据大大偏离了由巴哈马依照第 7 条提交的报告。世界银行在与秘书处的沟通中解释道，他们注意到了这些差别并已努力解决。世界银行无法提供 2002 年氟氯化碳消费核查报告，但表明不久将获得此报告。报告还意欲澄清 2002 年报告中的潜在差别。据世界银行称，2003 年报告差别是由各政府办公室之间缺乏交流造成的，而且巴哈马已经启动了按第 7 条修正其报告的程序。

11. 巴哈马遵守了协定的消费条款，但未遵守若干其他条款。巴哈马未遵守在依本协定的已核查数据与依《蒙特利尔议定书》第 7 条的报告数据之间一致性的要求。尽管秘书处收到了 2003 年的核查报告，但前一年的报告仍未提交。此外，报告基于与若干企业的自愿协定，这不能提供与从各港口收集到的官方进口数据相同的可信度。

12. 基于以上提出的问题，秘书处还无法建议一揽子核准“巴哈马结束性淘汰管理计划—2004-2005 两年期行动方案”。谨提议执行委员会审议核准所需项目的方案，但将推迟 2004-2005 两年期的拨款，直至 2002 年和 2003 年的消费数据已核查并与第 7 条中的数据一致。

建议

13. 鉴于以上评论，谨提议执行委员会审议该项目。

BAHAMAS
Terminal Phaseout Management Plan (TPMP)

Biennial Action Program
2004 - 2005
&
PROGRESS REPORT 2001-2003

Prepared by:

BEST Commission
and the National Ozone Unit
Ministry of Health and Environment
The Bahamas

September 2004

1.0 DATA

Country	Bahamas
Year of plan	2004 - 2005
No. of years completed	3
No. of years remaining under the TPMP	5
Target ODS Consumption of the preceding year (2003)	<ul style="list-style-type: none"> • 48 ODP MT of Annex A, Group I Chemicals (CFCs)
<u>Total</u>	48 ODP MT
Target ODS Consumption for 2004 and 2005	<ul style="list-style-type: none"> • 2004: 36 ODP MT of Annex A, Group I Chemicals (CFCs) • 2005: 25 ODP MT of Annex A, Group I Chemicals (CFCs)
<u>Total ODS</u>	36 ODP MT in 2004 25 ODP MT in 2005
Total funding approved in principle	USD 560,000
Total funding release by September 2004	USD 240,000
Level of funding requested	USD \$200,000
Lead implementing agency	The World Bank
Co-operating agencies	Nil

Introduction

1. In accordance with the Executive Committee's approval of the "The Bahamas National CFC Phaseout Plan" (Decision 35/52), The Bahamas is hereby requesting the release of the second tranche of US \$200,000 for the implementation of its 2004-2005 Biennial Action Program. After implementing this program, The Bahamas' CFC consumption will be reduced to: i) a maximum of 36 ODP tonnes by the end of 2004; and ii) a maximum of 25 ODP tonnes by the end of 2005. Details of the 2004-2005 Biennial Action Program are provided in Part II.
2. The Executive Committee (ExCom) of the Multilateral Fund for the Implementation of the Montreal Protocol has approved a total grant of US \$560,000 in funding for the phased reduction and complete phase-out of consumption of Annex A, Group I chemicals in The Bahamas. The approved funding and agreed annual targets are summarized in Table 1 below.
3. Following the approval of the NCFCP at the 35th Meeting of the ExCom in December 2001, The Bahamas has taken important steps towards the implementation of the Plan. Details of 2001-2003 activities and developments to date are found in Part I.

Table 1: Approved MLF Funding and ODP Reduction Schedule

Year	Annual Grant Funding US \$ (thousands)	Maximum allowable Annex A Group 1 consumption (ODP tonnes)	
		CFC	Total ODS
2001	240	66	66
2002		58	58
2003	200	48	48
2004		36	36
2005	120	25	25
2006		14	14
2007		0	0
2008		0	0
2009		0	0

PART I 2001-2003 PROGRAM ACCOMPLISHMENTS

1. TARGETS MET

4. The maximum allowable consumption target to be reached in 2003 was 48 ODP tonnes, corresponding to a reduction of 10 ODP tonnes from 2002.
5. The 2002 verification report indicated that total imports of CFC in 2002 amounted to 29.88 ODP tonnes, well below the maximum allowable consumption for that year.
6. A 2003 verification report, included in Annex 1, has indicated that CFC imports in 2003 amounted to 29.62 ODP tonnes. A summary of the findings of that report are included in Table 2. The Bahamas has met its 2003 reduction targets and is well on its way to meeting its 2004 and 2005 reduction commitments.

Table 2: Consumption of CFCs in 2003

All data in ODP Tonnes	CFCs
Maximum allowable consumption in 2003	48
Actual imports of CFC in 2003 (CFC-12)	29.62

2. SUMMARY OF GOVERNMENT ACTIONS

2.1 ODS Regulations

Import Registration and Quota Procedures

7. The National Ozone Steering Committee (NOSC) was established in late 2002, and includes members from the Ozone Office, Customs Department, the refrigeration, hotel, and fisheries associations, and other stakeholders. The NOSC meets once every month to discuss issues related to the implementation of the TPMP and with the overall phaseout of CFCs.
8. In early 2003 the NOSC, with assistance from the Attorney General Office, drafted legislation for the establishment of a licensing system for the import and export of ODS and the banning of imports of ODS-using equipment. The legislation is at the last stage of approval by Parliament, and it is expected to be approved by the end of 2004. Once approved the legislation will be signed by the Governor General. Once signed, the legislation will become law.
9. Since 2001, however, a system a voluntary quotas has been set up between CFC importers and the Government of the Bahamas (GOB), which has allowed to maintain consumption of CFCs in the country within the target levels of the agreement with the Executive Committee.

Voluntary Quotas for Importers

10. At the onset of implementation of the TPMP, the Government met with the largest CFC importers, representatives from refrigeration associations and other stakeholders and agreed on national reductions of CFC consumption, in line the Montreal Protocol targets. Importers signed letters of commitment with the Government, in which they confirmed their support to the Government's plan and agreed to the reduction targets. Importers have, to

this date, held their commitment, which has meant that the GOB has been in compliance with the Protocol.

11. All importers of CFCs must be registered with the Ozone Office, which controls that import licenses submitted by importers remain within their voluntary accepted limits, and that the national consumption remains below the maximum allowable levels.

SUMMARY OF INDUSTRY ACTIONS

3.1 MAC Sector Phaseout

12. The strategy initially proposed to phase out the use of CFCs in the MAC sector has been modified since the start of implementation of the TPMP, in order to adapt to the consumption patterns in the Bahamas, and therefore to the decreasing demand for CFC-12 in the sector. For instance, the retrofitting program that was originally proposed has not yet been implemented, due to the lack of demand for retrofitted vehicles. A corrosive environment, and an overall culture of replacing old vehicles for new ones at a relatively fast rate, results in the fact that the majority of vehicles currently on the road in the Bahamas is less than ten years old. Existing policies related to the ability to finance the purchase, or to find insurance for old cars, further dissuade buyers from acquiring them (see below). Since older vehicles are the only type of vehicles in the Bahamas that would require retrofitted MAC units, the retrofit program has not been given priority by the GOB. The average year of manufacture of the vehicle pool in the Bahamas is increasing steadily, and therefore the impact of a retrofitting program will be re-evaluated.
13. A recycling program conducted under the Refrigerant Management Program for the Bahamas, funded by UNEP, included the distribution of recycling machines to service shops. In addition, self-funded industry programs included the purchase of recycling equipment for various enterprises. The number of available recycling machines was, until recently, sufficient to satisfy the needs of the country, especially given the decreasing demand for CFC-12. While the GOB supported CFC recycling efforts through public awareness and training campaigns, no additional recycling equipment had been purchased under the TPMP.
14. A number of policies are in place in the Bahamas, which although not legally enforceable, are a disincentive to the use of ODS by the country's MAC sector. Examples of such policies include: i) ban on imports of cars older than eight years old, which limits the number of CFC-based MAC units in the market; ii) insurance restrictions placed on cars older than 10 years, which promotes the use of new cars, thus further decreasing the demand for CFC-12 for MACs; and iii) restrictions on bank loan for the purchase of cars older than four years.

3.2 Refrigeration Sector Phaseout

15. Similarly to the trends described for the MAC sector, the consumption of CFCs by the refrigeration sector in the Bahamas has decreased considerably since the onset of the TPMP. CFCs are no longer being consumed by fisheries or by the cold transportation sector, two sectors that were deemed critical to the success of the TPMP. The phaseout of CFCs in these sectors is due to a combination of the Government's public awareness campaigns, and to the industry's own effort to eliminate the use of these substances.
16. The action plan developed for the refrigeration sector has primarily focused on public awareness and training activities that have been put in place by the Government in support of the industry's programs. With regards to the use of CFCs in the domestic refrigeration sector, no CFC-based refrigerators are currently being imported into the Bahamas. Given

the patterns of consumption in the country, which are consistent to those observed in the automotive sector, the demand for old retrofitted domestic refrigerators or for recycled CFC for domestic use is not significant, at present, to justify a retrofitting program.

3. SUMMARY OF TECHNICAL ASSISTANCE ACTIVITIES

17. With the establishment of the NOSC also came the resurgence of the two refrigeration unions, both of which have representation on the NOSC. It is through the assistance of these sector representatives that a clear and cooperative approach to the TPMP is being achieved. It is through this interaction that most private business have reduced their level of imports, in accordance to their voluntary quota system.

4.1 Training for MAC and Refrigeration Sector Technicians

18. In conjunction with the Bahamas Technical Vocational Institute (BTVI) and the Commercial Refrigeration Association, the Government has put in place three training programs, which periodically offer training to technicians in the refrigeration sector. The programs include: i) complete refrigeration training for new technicians in the sector; ii) in-depth upgrade courses in refrigeration for experienced technicians; and iii) short training on management of CFC substitutes.

19. Course curricula and training manuals have been developed on the basis of those used by the Pennsylvania Technical Institute (PTI), which has an established program of collaboration with BTVI. Technicians are certified by both BTVI and the PTI upon completion of the course.

4.2 Customs training

20. Since 2001, three separate training and workshop programs have been implemented with representatives from Customs, Fire Department, Police, Private sector industry and local media.

21. In 2002, a Customs-ODS Training Manual was developed by international consultants. Custom officers from Abaco, Grand Bahama and Eleuthera islands were represented at the workshops.

4.3 Public Awareness

22. Under the directive of the BEST Commission, the Ozone Office and the NOSC, several programs have been implemented to enhance public awareness about the phase out of ODS in The Bahamas, and to formulate sector policies and prepare action plans for each activity. A brief description of the activities undertaken is provided below.

23. Every year since 2002, the Government has undertaken various public education and awareness programs. In 2003, the Minister of Health addressed the country and provided an outline of the Government's policy and pending legislations regarding ODS imports into the country. Numerous radio programs and talk shows have been conducted along with public displays at the National Post Office and public Malls. The purpose of these activities is to disseminate information on legislations, strategies and overall Government policy, and their potential effects on relevant stakeholders. There has also been strong use of the Ozone Song which is played regularly by local radio stations during Ozone week.

24. Visits have been made to schools to educate and inform the students about the environmental impacts of ODS, about CFC-based equipment, and about the various uses

for the gases. During these visit students and faculty are informed about potential alternatives, as well as about pending policies and regulations.

4. PROJECT MANAGEMENT

25. All project management activities related to the TPMP are handled by the Bahamas Environment Science and Technology (BEST) Commission, under the Ministry of Health. All project implementation-related activities are handled by the Ozone Office, under the same Ministry.

5. BUDGET 2002-2003

Activity	Planned Expenditures in 2002 (USD)	Actual Expenditures in 2002 (USD)	Planned Expenditures in 2003 (USD)	Actual Expenditures in 2003 (USD)	Total Expenditures 2002-2003 (USD)
Government actions		18,967		42,839	61,806
MAC sector phaseout		32,491		54,516	87,007
Refrigeration sector phaseout		12,355		24,710	37,065
Technical Assistance		9,833		19,667	29,500
Project Management		6,142		10,617	16,759
TOTAL	130,000	91,725	110,000	140,413	232,137

PART II 2004-2005 Program

1. TARGETS

Table : National Targets

Target (ODP Tons)					
Indicators		Preceding Year (2003)	First year of Biennial Plan (2004)	Reduction from previous year	Second year of Biennial Plan (2005)
Supply of ODS	Max. allowable import	48	36	12	25
	Actual imports (2003) or planned imports (2004,2005)	29.62	25	23	18
Demand of ODS projected in NCPP	Manufacturing	0	0	0	0
	Servicing	29.62	25	4.62	18
	Total	29.62	25	4.62	18

2. PLANNED GOVERNMENT ACTIONS

26. The Bill on controlled substances that will allow to establish official import restriction on ODS is expected to become a law by the end of 2004. Government efforts in 2005 will be focused on the implementation of the new law, and particularly on the establishment of import quotas. The Ozone Office will be the lead agency charged with the implementation of the law.
27. The Government will actively pursue the implementation of a system for documenting exports of CFCs to other countries (primarily the U.S., Cuba and Haiti). Undocumented exports of CFCs, which typically take place as vessels visit the Bahamas and purchase refrigerants, are currently not being discounted from national consumption figures. The Government has made considerable efforts to raise awareness on the importance of documenting those exports and will put in place a reporting system in early 2005.
28. An assessment of the refrigeration sector will be undertaken by the College of The Bahamas with the following objectives: a) to document the progress accomplished by the sector, to date, in phasing out CFCs; and b) to identify available transition technologies that will be helpful to small sector groups that may have difficulties in achieving a complete phaseout. Results of this assessment will later be used by the Government to design specific sector initiatives to assist the identified groups with their conversion.
29. In 2004, the Government commissioned international consultants to carry out an investigation of the recycling alternatives best suited for the Bahamas. Results from the study will be incorporated into initiatives planned for 2005 (see below).

3. PLANNED INDUSTRY ACTIONS

3.1 MAC and Refrigeration Sectors

30. In conjunction with the Refrigeration Association and with BTVI, a CFC recycling and recovery program will be initiated in 2005. Facilities at BTVI, including a CFC recovery tank acquired as part of the RMP that has not been used, will be upgraded. In addition, operators will be trained to recover refrigerant from MAC units as well as from refrigeration equipment. Technicians will be encouraged to take all recovered CFCs and old equipment containing CFCs, to the BTVI facility. The program will be advertised through the public awareness campaigns that the Government conducts, and through the training courses offered at BTVI.

4. PLANNED TECHNICAL ASSISTANCE ACTIVITIES

31. All training activities will be expanded to the Family Islands (Eleuthera, Abaco, Grand Bahama, etc.). Up to date, training courses had primarily been conducted in New Providence, and technicians from the Family Islands had been invited to participate in the activities. Starting in 2005, training will be decentralized.

32. Additional training equipment will be provided to BTVI such that training of refrigeration technicians can continue. Moreover, a Government-sponsored certification program will be promoted, through which technicians that have passed refrigeration training courses will become certified.

33. Refresher training programs for local Customs Agents, Fire Department and the Royal Bahamas Police Force agents will be undertaken.

4.1 Public Awareness

34. Public awareness programs will continue through radio, television and the local media. In addition, the Government will coordinate school visits and exhibits at public and business establishments (e.g. Central Post Office).

35. Development and update of public education material such as a national ODS handbook, public pamphlets and a short video that highlight regulations and licensing requirements.

36. The Bahamas Environmental Handbook will be updated and the National Ozone Calendar will be published and distributed around the islands.

5. PROJECT MANAGEMENT

37. Maintenance and support of the project management office will continue throughout the 2004-2005 period.

6. BUDGET FOR 2004-2005

Activity	Planned Expenditures in 2004 (USD)	Planned Expenditures in 2005 (USD)	Planned Expenditures 2004- 2005 (USD)
Government actions	15,000	15,000	30,000
MAC and refrigeration sectors phaseout	53,000	53,000	106,000
Technical Assistance	20,000	20,000	40,000
Project Management	12,000	12,000	24,000
TOTAL	100,000	100,000	200,000

ANNEX 1

THE BAHAMAS

2003 CFC Consumption Verification Report

Data collection performed by:

The College of the Bahamas Research Unit (COB/RU)

July 2004

1. INTRODUCTION

As part of the implementation of the Terminal CFC Phase-out Management Plan (TPMP) for the Bahamas, a verification of imports of CFCs in 2003 was undertaken by the College of the Bahamas Research Unit (COB/RU). A final report was submitted to the Bahamas Environment, Science and Technology (BEST) Commission on July 7, 2004. The following sections provide an overview of the methodology used in collecting the data and of the results obtained.

2. BACKGROUND

2.1 Regulatory framework and the TPMP

In 2000, the Bahamas reported a CFC consumption of 66 MT, roughly 12% greater than its freeze level target. In 2001, the TPMP was designed to bring the country back in compliance with the Montreal Protocol, by progressively reducing its CFC consumption, such that a complete phaseout was achieved by 2008. The consumption target set for 2003 was 48 ODP tonnes.

One of the first objectives of the TPMP was to promote the establishment of an import control system, based on a principle of yearly import quotas set by the relevant Government agencies. A quota system did not exist in the Bahamas at the time, due to the lack of a regulatory framework that allowed to impose such control on ODS imports. While the necessary legal instruments were developed and put in place, the Bahamas established a voluntary import licensing system in 2002. CFC importers agreed to: a) voluntarily report import data; b) reduce their imports of CFCs according to yearly levels determined by the Government; c) control sales to re-exporters; and d) convert to a mandatory quota system once it had been implemented by the Government. The Bahamas Ozone Office, within the Department of Environmental Health and Services of the Ministry of Health, is the agency that tracks imports of all substances controlled by the Montreal Protocol.

The Bill for an Act to give effect to the Montreal Protocol, which would legally allow to set up import quotas, has undergone two Parliament readings and is currently on its third and final round. The Bill is expected to pass the end of 2004, at which point the import licensing system for controlled substances will become a national law and will thus be legally binding to the importers.

2.2 National CFC consumption

CFC consumption, as per the Montreal Protocol definition, is taken as production plus imports minus exports. No CFCs are produced in the Bahamas. Although exports of previously imported CFCs are known to occur, there is currently no official mechanism to track them. These often occur as ships (typically from the US) stop in the islands to do maintenance to their MAC or to stock on CFC-12 supplies. An extensive public awareness campaign has been conducted in the Bahamas over the past four years, which has targeted, among others, the undocumented sale of CFCs to foreign vessels. US coastguards have also intensified their control on illegal imports of CFCs, and as result, the unofficial levels of exported CFCs from the Bahamas have decreased. However, since no official record exists of these sales, exports of CFCs are still being accounted for as national consumption.

All the CFC consumption in the Bahamas is in the refrigeration and air conditioning sectors, with over 90% of it in the MAC sector. A prior CFC consumption verification report conducted for the period from 1999 to 2002 indicated that a relatively small number of importers accounted for over 90% of the CFC imports. These companies import for wholesale and retail sale, in addition to their own uses. They typically sell to refrigeration servicing shops and MAC servicing and

repair workshops. There is a large number of very small companies that import CFCs on an irregular basis, mostly for specific jobs. Other smaller imports only place orders every other year, to avoid high shipping costs. As a result, a large number of importers are registered at the Ozone Office, but only a number of them imported CFCs in 2003, as will be shown in section 4.

3. METHODOLOGY

The verification process included the following steps:

- Obtaining a database of registered importers from the BEST Commission along with letters of presentation that explained the purpose of the verification process.
- Contacting all registered importers and obtaining information on: a) annual imports of CFCs; b) CFC suppliers; c) annual sales; d) amount exported, if applicable; and e) end-of-year stocks.
- Most companies did not provide information on exported amounts or on end-of-year stocks. The following two conservative assumptions were thus made as results were compiled: a) all CFC imported in 2003 were sold during the year; and b) no unmonitored exports took place during 2003.
- Information provided by importers was cross-checked against import licenses received at the Ozone Office.
- Information provided by importers was cross-checked against suppliers records. Although not all suppliers provided detailed information on the orders made by each company, the largest suppliers provided detailed accounts of their shipments.
- The Customs Department database was checked for consistency.

4. RESULTS

Table 1 provides a list of the 24 importers of ODS to the Bahamas in 2003 and the amounts of CFC-12 they imported. Twelve of the companies listed did not import CFC-12 in 2003, but as they imported other controlled ODS substances and blends (e.g. R-502 and HCFCs), they are part of the voluntary import licensing system managed by the Ozone Office. Table 1 also provides the location of the companies and their suppliers.

Table 1. Importers of ODS to the Bahamas in 2003

Company name	Location	CFC-12 (MT)	%	CFC suppliers
Bahamas Welding and Fire Co., Ltd.	Nassau, NP	10.80	36.5	Galco S.A. (Belgium)
Taylor Industries, Ltd.	Nassau, NP	5.44	18.4	Harp International (UK)
Bay Street Garage Ltd.	Nassau, NP	4.29	14.5	Top Guard Corporation (US)
WHIM Automotive Ltd.	Nassau, NP	3.67	12.4	Top Guard Corporation (US)
Freeport Gases	Freeport, GB	2.80	9.5	Galco S.A. (Belgium)
FIA, Ltd.	Nassau, NP	0.82	2.8	Fidelity International (US)
Cartwright's Garage Ltd.	Nassau, NP	0.54	1.8	Hartwell International (US)
Associated Grocers of the Bahamas	Nassau, NP	0.41	1.4	Fidelity International (US)
Asa H. Pritchard	Nassau, NP	0.41	1.4	Fidelity International (US)

Company name	Location	CFC-12 (MT)	%	CFC suppliers
Rolles Auto Parts and Accessories	Nassau, NP	0.20	0.7	ABI Auto Parts (US)
Multi Auto Parts	Nassau, NP	0.20	0.7	Global Refrigerant (UK)
Donnie's Electrical Abaco	Abaco	0.03	0.1	Tropical Supply (US)
C & G Air Conditioning Co. Ltd.	Freeport, GB	---	---	Refricenter International (US)
Hill York Ltd.	Nassau, NP	---	---	Refricenter International (US)
Bain Industries Ltd.	Freeport, GB	---	---	Pioneer Metal Inc. (US)
Awez Air Conditioning	Nassau, NP	---	---	Pioneer Metal Inc. (US)
Carter's Air Conditioning	Freeport, GB	---	---	E Air (US)
The Refrigeration Centre	Nassau, NP	---	---	Pioneer Metal Inc. (US)
Marco Air Conditioning	Marsh Harbour	---	---	Arco Supply (US)
Automotive and Industrial Distributors Ltd.	NP, GB, Abaco	---	---	Refrigerants Inc. (US)
Super Value Food Stores	Nassau, NP	---	---	Fidelity International (US)
Bahamas Supply Air Conditioning Ltd.	Nassau, NP	---	---	CIAC (US), Coastline (US)
Bahamas Super Market Limited	Freeport, GB	---	---	Hussman Corporation (US)
Paradise Air Conditioning	Nassau, NP	---	---	E Air (US)
Total		29.62	100	

A breakdown of CFC imported in 2003, by suppliers, is provided in Table 2.

Table 2. Suppliers of CFC-12 to the Bahamas in 2003

CFC-12 suppliers	CFC-12 (MT)	%
Galco S.A. (Belgium)	13.60	45.9
Top Guard Corporation (US)	7.97	26.9
Harp International (UK)	5.44	18.4
Fidelity International (US)	1.63	5.5
Hartwell International (US)	0.54	1.8
ABI Auto Parts (US)	0.20	0.7
Global Refrigerant (UK)	0.20	0.7
Tropical Supply (US)	0.03	0.1
Total	29.62	100.0

5. **CONCLUSIONS**

- The total amount of CFC-12 consumed in the Bahamas in 2003 was 29.62 ODP tonnes. This value is lower than the maximum allowed CFC consumption for the year, which was set at 48 ODP tonnes. Twelve companies imported CFC-12 in 2003. The largest importer, accounting for roughly 37% of all imports was Bahamas Welding and Fire Company, located in Nassau, in the island of New Providence.
- Eight companies supplied CFC-12 to the Bahamas during 2003. The largest supplier, Galco S.A., accounted for approximately 46% of the total amount.