



**Programme des  
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FRANÇAIS  
ORIGINAL : ANGLAIS

COMITÉ EXÉCUTIF  
DU FONDS MULTILATÉRAL AUX FINS  
D'APPLICATION DU PROTOCOLE DE MONTRÉAL  
Quarante-quatrième réunion  
Prague, 29 novembre – 3 décembre 2004

**PROPOSITION DE PROJET : MALAISIE**

Ce document contient les observations et les recommandations du Secrétariat du Fonds sur la proposition de projet suivante :

Élimination

- Plan national d'élimination des CFC : programme de travail annuel de 2004

Banque  
mondiale

## DESCRIPTION DU PROJET

### Contexte

1. La 35<sup>e</sup> réunion du Comité exécutif a approuvé le plan national d'élimination de CFC en Malaisie et a accordé, en principe, un appui financier total de 11 517 005 \$US à décaisser de 2002-2010 pour l'élimination de la consommation restante de 2 092 tonnes PAO de CFC du groupe I de l'Annexe A, 33 tonnes PAO de 1,1,1 TCA et 4 tonnes PAO de tétrachlorure de carbone. Depuis l'approbation du projet, les tranches de 2001, 2002 et 2003 ont été décaissées à la Banque mondiale, représentant un décaissement total de 6 782 105 \$US. La Banque mondiale présente son programme de travail annuel pour l'année 2004, conformément aux dispositions de l'accord, et demande le décaissement de la tranche de financement de 2004, qui représente 1 688 300 \$US, plus les coûts d'appui connexes de 143 947 \$US. Les documents remis comprennent un rapport sur la réalisation du programme de travail de 2003, le programme de travail proposé pour l'année 2004 et un rapport d'un vérificateur accrédité sur les importations de CFC en 2003. Le programme de travail annuel de 2004 du plan national d'élimination des CFC et le rapport du vérificateur accrédité de la Malaisie sont joints aux présentes.

### Réalisation du programme de travail de 2003

2. L'accord prévoit une consommation maximum permise de 1 618,51 tonnes PAO de CFC, 1,1,1 TCA et de tétrachlorure de carbone en 2003, dans les proportions suivantes : 1 566 tonnes PAO de CFC, 48 tonnes PAO de 1,1,1 TCA et 4,51 tonnes PAO de tétrachlorure de carbone. La consommation réelle rapportée est de 1 465,01 tonnes PAO de CFC, 6,93 tonnes PAO de 1,1,1 TCA et de zéro pour le tétrachlorure de carbone, ce qui représente une consommation totale des trois substances de 1 471,94 tonnes PAO. Cette réduction de la consommation a été réalisée de plusieurs façons : par la mise en oeuvre de projets approuvés avant le plan national d'élimination, par l'identification et le financement de la consommation restante de ces SAO dans les petites et moyennes industries de plusieurs secteurs d'activités, et par des activités d'assistance technique dans le secteur de l'entretien de l'équipement de réfrigération. Le rapport sur le programme de travail de 2003 contient une description des activités réalisées en 2003 dans le cadre de l'assistance technique, dont la préparation de la stratégie de transition pour les inhalateurs à doseur, les progrès concernant l'inspection obligatoire des climatiseurs d'automobile qui entrera en vigueur en 2005, le programme de formation des formateurs et d'accréditation des techniciens d'entretien des climatiseurs d'automobile, la formation des agents de douane et le fonctionnement du bureau de gestion du projet. La description a été améliorée par une présentation par onglets sur les progrès de chaque activité portant sur l'objectif, le groupe cible, les incidences et l'état de la mise en oeuvre. Le rapport financier de 2003 fournit des données sur les dépenses prévues (2 064 000 \$US) par rapport aux dépenses réelles (614 127 \$US) de onze activités, c'est-à-dire un taux de décaissement de 30 pour cent.

### Programme de travail annuel de 2004

3. Le programme de travail pour l'année 2004 propose des consommations maximales de 1 136 tonnes PAO pour les CFC, 48 tonnes PAO pour le 1,1,1 TCA et 4,51 tonnes PAO pour le

tétrachlorure de carbone, ce qui représente un total de 1 188,51 tonnes PAO pour les trois substances et est conforme aux objectifs de l'accord. Nonobstant des objectifs, le programme annuel vise à limiter à 1 124 tonnes PAO l'importation totale de ces SAO. Le programme comprend également une description des activités que le gouvernement prévoit entreprendre, à savoir l'annonce en 2004 de l'inspection obligatoire des climatiseurs d'automobile à compter de 2005, les reconversions industrielles qui restent à faire dans le secteur manufacturier et les activités d'assistance technique prévues au cours de l'année. Une présentation par onglets de l'objectif, du groupe cible, des incidences et de l'état a été préparée pour chaque activité. Le budget proposé du programme de travail annuel de 2004 précise la répartition des coûts prévus pour les 14 activités, pour une dépense totale de 3 098 251 \$US.

### **Vérification des importations de SAO**

4. La vérification des importations de CFC, 1,1,1 TCA et de tétrachlorure de carbone pour l'année 2003 a été réalisée par un vérificateur accrédité au nom du vérificateur général de la Malaisie. Le vérificateur a examiné les procédures d'émission des quotas d'importation par rapport aux demandes de permis d'importation accueillies favorablement par le ministère du Commerce international et de l'Industrie, de même que les procédures de contrôle des importations appliquées par le ministère royal des Douanes. Ce rapport décrit les procédures de vérification, qui comprennent la vérification du processus d'émission des quotas d'importation pour 2003, la vérification des quotas accordés aux importateurs, la vérification des dossiers des douanes et des documents des importateurs, et la vérification des dossiers du ministère des Statistiques. Enfin, le rapport conclut que les importations ont atteint les 1 465 tonnes PAO de CFC, 6,93 tonnes PAO de 1,1,1 TCA et zéro pour le tétrachlorure de carbone, en 2003. Le rapport de vérification conclut que les procédures employées par le gouvernement de la Malaisie pour contrôler les importations de SAO étaient satisfaisantes, et réitère sa recommandation de 2003 invitant le ministère de l'Environnement, à titre de ministère de coordination des plans nationaux d'élimination, à ne pas se fier uniquement aux données secondaires du ministère des Statistiques à l'avenir, mais à faire le rapprochement des données d'importation du ministère des Statistiques et du ministère du Commerce international et de l'Industrie.

## **OBSERVATIONS ET RECOMMANDATIONS DU SECRÉTARIAT**

### **OBSERVATIONS**

5. Les rapports sur les programmes de travail de 2003 et de 2004 ont été préparés conformément aux lignes directrices pour la préparation, la mise en œuvre et la gestion des plans nationaux et sectoriels d'élimination des SAO (UNEP/OzL.Pro/ExCom/38/57) approuvées à la 38<sup>e</sup> réunion du Comité exécutif. Le rapport sur le programme de travail de 2003 renferme de l'information sur les progrès réalisés dans les différentes activités du plan national d'élimination et leurs incidences sur l'atteinte de l'objectif d'élimination de l'année en question. Le programme de travail de l'année 2004 fixe des objectifs précis conformes aux objectifs de l'accord et appuyés par des activités concrètes qui seront mises en œuvre par le gouvernement et l'industrie.

6. Un des indicateurs d'efficacité pour l'année 2004 contenus dans l'accord consiste à annoncer l'interdiction d'utiliser les CFC dans le secteur manufacturier en 2005, mais le programme de travail n'offre aucune description claire de l'état de cette politique du gouvernement, comme par exemple la possibilité de sa réalisation en 2004. L'indicateur d'efficacité porte également sur un autre point, à savoir si les efforts actuels visant à reconvertir toutes les PME qui consomment des CFC allaient être menés à terme d'ici la fin de 2004 afin que ces entreprises ne subissent pas les effets néfastes de l'interdiction en 2005.

7. Le rapport sur la vérification des importations de CFC et de 1,1,1 TCA en 2003 révèle que le gouvernement de la Malaisie a mis en œuvre un système fonctionnel de contrôle des permis d'importation de SAO. La vérification a été effectuée au moyen d'une méthode fiable et a utilisé des données de sources diverses aux fins de validation. Le vérificateur a toutefois réitéré sa recommandation du rapport de l'an dernier invitant le ministère de l'Environnement, à titre de ministère de coordination des plans nationaux d'élimination, à ne pas se fier uniquement aux données du ministère des Statistiques, mais à faire le rapprochement des données d'importation du ministère des Statistiques et du ministère du Commerce international et de l'Industrie. Il n'est pas confirmé que le gouvernement a mis en œuvre la recommandation du vérificateur.

## **RECOMMANDATIONS**

8. Le Secrétariat recommande que le Comité exécutif :
- a) Approuve le programme de travail du plan national d'élimination des CFC pour l'année 2004 en Malaisie au niveau de financement demandé de 1 688 300 \$US et les coûts d'appui connexes de 143 947 \$US pour la Banque mondiale.
  - b) Prenne note, avec gratitude, du rapport du vérificateur accrédité sur les importations de CFC, 1,1,1 TCA et de tétrachlorure de carbone pour l'année 2003 en Malaisie et demande à la Banque mondiale d'effectuer les suivis nécessaires de la recommandation du vérificateur concernant le système de contrôle des importations de SAO.
  - c) Demande à la Banque mondiale d'inclure dans le programme de travail de 2005 de l'information sur l'état de la mise en œuvre de l'interdiction d'utiliser les CFC dans les industries du secteur manufacturier et l'achèvement de la reconversion industrielle des petites et moyennes entreprises.

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MALAYSIA  
National CFC Phase-out Plan (NCFCP)  
2002-2010

**2004 Annual Program**

Prepared by:

**Ozone Protection Section**  
Department of Environment (DOE)  
Ministry of Natural Resources  
And Environment  
MALAYSIA

September 2004

## 1.0 DATA

Country	<b>MALAYSIA</b>
Year of plan	2004
No. of years completed	2
No. of years remaining under the plan	6
Target ODS Consumption of the preceding year <b>(2003)</b>	<ul style="list-style-type: none"> <li>• 1,566 ODP MT of Annex A, Group I Chemicals (CFCs)</li> <li>• 48 ODP MT of TCA</li> <li>• 4.51 ODP MT of CTC</li> </ul>
<b>Total</b>	<b>1,618.51 ODP MT</b>
Target ODS Consumption of the year of plan <b>(2004)</b>	<ul style="list-style-type: none"> <li>• 1,136 ODP MT of Annex A, Group I Chemicals (CFCs)</li> <li>• 48 ODP MT of TCA</li> <li>• 4.51 ODP MT of CTC</li> </ul>
<u>Total ODS</u>	<b>1,188.51 ODP MT</b>
Level of funding requested	<b>Investments: USD 1,488,300</b> <b>PMU costs: USD 200,000</b> <b>Total: USD 1,688,300</b>
IA Support costs	Investment activities (9%): USD 133,947 <u>PMU (5%): USD 10,000</u> USD 143,947
Lead implementing agency	The World Bank
Co-operating agencies	Nil

## Introduction

1. In accordance with the Executive Committee's approval of the "Malaysia National CFC Phaseout Plan" (Decision 35/53), Malaysia is hereby requesting the release of the fourth tranche of US\$1,688,300 for the implementation of its 2004 Annual Program. After implementing this program, Malaysia's CFC consumption will be reduced to a maximum of 1,136 ODP tonnes by the end of 2004. Similarly, the country's consumption of 1,1,1 TCA and CTC will be reduced to a maximum of 48 ODP tonnes and 4.51 ODP tonnes, respectively. Details of the 2004 annual 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 \$11,517,005 in funding for the phased reduction and complete phase-out of consumption of Annex A, Group I chemicals, 1,1,1 TCA and CTC in Malaysia. The approved funding and agreed annual targets are summarized in Table 1 below.
3. Following the approval of the NCFCP at the 35<sup>th</sup> Meeting of the ExCom in December 2001, Malaysia has taken important steps towards the implementation of the Plan. Details of 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\$ (million)	Maximum Consumption allowed under NCPP (ODP tonnes)			
		CFC	1,1,1 TCA	CTC	Total ODS
2001	1,799,940				
2002	2,969,065	1,855	51	4.51	1910.51
2003	2,013,100	1,566	48	4.51	1618.51
2004	1,688,300	1,136	48	4.51	1188.51
2005	1,208,300	699	18	0.68	717.68
2006	1,013,300	579	18	0.68	597.68
2007	275,000	490	18	0.68	508.68
2008	275,000	401	18	0.68	419.68
2009	275,000	332	18	0.68	350.68
2010	0	0	0	0	0

## PART I - 2003 ANNUAL PROGRAM ACCOMPLISHMENTS

### 1. TARGETS MET

1. The maximum allowable consumption target for 2003 was set at 1,618.51 ODP tonnes, amounting to a reduction of 292 ODP tonnes from 2002 levels.
2. The 2002 verification report, submitted at the 40<sup>th</sup> Meeting of the Executive Committee, showed that a total of 1658.18 ODP tonnes of CFC, 12.8 ODP tonnes of 1,1,1 TCA and no CTC were imported within the Calendar year (January 1 to December 31, 2002). This was well below the maximum allowable consumption for 2002 of 1,855 ODP tonnes of CFC and 51 ODP tonnes of TCA.
3. The 2003 consumption verification report indicates that consumption targets under the Agreement have also been met. A summary is provided in Table 2, below. Consumption in 2004 is also expected to be lower than the annual target, and Malaysia is therefore well on its way to meet the 2005 reduction commitments of the Montreal Protocol.

**Table 2: Consumption in 2003**

All data in ODP Tonnes	CFCs	1,1,1 TCA	CTC	Total
Maximum allowable consumption in 2003	1,566	48	4.51	1,618.51
Actual imports in 2003 <sup>1</sup>	1,465.01	6.93	0	1,471.94

<sup>1</sup> As presented in the 2003 verification report, which is being submitted along with this Annual Work Program. The audit conducted is based on records provided by the Customs Department. The figure reported includes ODS shipments that took place in the final months of 2002 but that were recorded by the Customs in 2003, and it is estimated that there is a delay of approximately 3 months in data recording after ODS shipments arrive to port. **The actual consumption in 2003, as reported by DOE, was 1,174.4 MT ODP of CFCs and 11.4 MT ODP of TCA, for a total ODS consumption of 1,185.84 MT ODP.** This actual consumption will be used in Part II of this report (i.e. Tables 6 and 7). Both numbers are well below the annual ceiling. This difference will be addressed by the Bank in a meeting with the auditor during the next supervision mission.

### 2. SUMMARY OF TECHNICAL ASSISTANCE ACTIVITIES

4. Under the directive of the National Steering Committee on the Ozone Protection (NSC), DOE initiated formal discussions with all concerned agencies in order to establish a number of working groups that would formulate sector policies and prepare action plans for each activity. A brief description of the activities undertaken is provided below.

#### 2.1 MDI Program

5. A working group (WG), chaired by the National Pharmaceutical Control Bureau (NPCB), Ministry of Health was established in late 2002. In May 2003, the WG agreed to appoint NPCB to conduct of a study and to prepare a National Transition Strategy to Phase Out CFC in MDI. DOE appointed NPCB as a consultant for the period of August 2003 until March 2004. NPCB is required to prepare the National Transition Strategy to Phase out CFC in MDI sector and increase public awareness on non-CFC products in MDI. The cost agreed to implement the task is USD 50,000. The draft report describing the current situation of CFC and non-CFC MDI markets in Malaysia and the existing policy framework in promoting the transition of non-CFC MDI products or other alternatives was circulated to WG in November 2003, for additional inputs and comments.



## **2.2 MAC Inspection Program (PUSPAKOM)**

6. DOE appointed a consultant in November 2003. Based on the TOR, the consultant is required to prepare a Standard Inspection Training Manual (SITM), which to be used by the local inspection authority such as PUSPAKOM, Road Transport Dept. (RTD) and DOE. The SITM will comprise all details of the system and its application. In addition, the consultant will produce the pamphlets, stickers and will develop an awareness program, which will be distributed to all commercial vehicles after each inspection in PUSPAKOM. The first draft of SITM was submitted to DOE and a discussion was held in December 2003.

## **2.3 Custom-ODS Training Program (COTP)**

7. In May 2003, DOE initiated a discussion with the Customs Department and the Malaysia Custom Academy (AKMAL) regarding the Custom ODS Training Program (COTP) and the implementation program in related to NCFCP. Based on TOR, DOE appointed a consultant in August 2003 to prepare the Customs-ODS Training Manual (COTM). The cost is USD 10,526.32. A small working group discussed the final draft manual in December 2003.

## **2.4 ODS Awareness Program**

8. A National ODS Seminar was organized in July 2003 with participation of more than 400 representatives from various ODS sectors and government agencies. The purpose of the seminar was to disseminate information on NCFCP strategies and the Government policy to relevant stakeholders in the government sector and the general public. In addition, DOE jointly organized the Chiller/Commercial Refrigerant Training Management, CRTM (3 series), International RAHV Refrigerant Conference, MAC Servicing Sector Roundtable Discussion, Refrigerant and Halon Management Regulations Training Course and ODS Exhibition as well as Malaysia JICOP seminar HCFC alternative technology. DOE also participated in meetings or workshops such as 23rd OEWG (Montreal), 15th COP Meeting (Nairobi), MEA Workshop (Colombo), MB Alternative Workshop (Ho Chi Minh) and SEAP ODS Networks and Customs ODS Meetings (Phuket).

## **3. INDUSTRY ACTION (SUB PROJECT)**

### **3.1 MAC Servicing Sector**

#### Certification of ATC – Train the Trainer Program (TTP)

9. In March 2003, a Group Coordinator (GC) was appointed as a consultant by DOE. The scope of work and objective of the program was clarified in the agreement and GC is responsible for developing training modules, technical expertise to train the trainers program, and coordinating the procurement of equipment. The procedures for equipment procurement were established in November 2003.

10. Thirty (30) Authorized Training Centers (ATC) were also identified. In December 2003, Letters of Commitment (LOC) were signed by ATC as commitment to participate in the Train the Trainer Program (TTP). ATCs will be represented by 2 participants. The training provides details of the program, hands-on technical training of the R&R Machines, MAC Tools, Refrigerant Identifiers and a theory and practical test .

11. DOE will issue an accreditation letter to ATC as a qualified MAC Servicing Workshop under NCFCP. After the accreditation, each ATC will be required to conduct a training program to train MAC service workshop within their region (Certification of Technician) before 2006. Qualified suppliers for R & R machine and MAC servicing tools have been identified and invited to supply these equipments to ATC. The invitation process was announced in the newspaper in August 2003.

12. In addition to promoting the MAC Service Sector, DOE organized National ODS Seminar and meeting (also attended by 350 workshop owners) in July and October 2003. Concurrently, the Environmental Council Committee has agreed to amend the Environmental Regulation (Refrigerant Management) 1999, which will specifically include the MAC services.

#### Procurement of Equipment

13. Each ATC will receive 2 sets of R&R and MAC Service Tools for total value of USD 8,280 and these will be carried out via voucher scheme. GC will assist DOE in coordinating the distribution of the MAC service tools, R&R units and vouchers.

### **3.2 ODS Solvent Study**

14. Based on TOR, DOE appointed a consultant from the PMU budget to carry out a final survey on the remaining users of CFC 113, 111 TCA and CTC in SME. An agreement was signed in July 2003. The final report has been received and endorsed by DOE. In the report 2 eligible SME were identified.

### **3.3 Foam Phase-Out Project**

15. DOE proceeded with preparation of foam subproject by preparing TOR. A consultant was selected in January 2003 to assist the small medium enterprises in preparing project proposals. 14 SMEs (Group Project) were qualified for financial assistance through the voucher scheme (maximum @USD 7,500) that was approved by DOE/WB. In addition, only 4 qualified suppliers on CFC-free technology/HCFE on foam have been identified. Discussions with 14 SMEs and suppliers were carried out in September 2003. 18 industries (Individual Projects) were also identified and project proposals were prepared by the consultant. DOE reviewed and sent the report to CETEC for appraisal in November 2003.

A summary of Technical Assistance activities and Industry Actions that were carried out during 2003 is summarized in tables 3 and 4:

**Table 3: Technical Assistance activities carried out in CY 2003**

NO	CY2003	OBJECTIVES	To increase awareness on CFC MDI transition plan
	CFC in MDI Sector	TARGET GROUP	Pharmaceutical Association, Doctors, MDI Importers, And Patients
		IMPACT	To promote the use of non-CFC MDI
	DESCRIPTION	STATUS/REMARKS	
1	Selection of consultant Development and strategies taken	<ul style="list-style-type: none"> <li>• TOR/SOW was approved by the World Bank (WB) and the working group (WG) in May 2003.</li> <li>• On 19/5/2003, WG agreed to appoint NPCB to conduct of a study and prepare National Transition Strategy to Phase Out CFC in MDI.</li> <li>• NPCB appointed by DOE to do the survey/research for the period of August 2003 to March 2004</li> <li>• Draft report describing the current situation of the CFC and Non-CFC MDI markets in Malaysia and the existing policy was circulated to WG in November 2003</li> </ul>	

NO	CY2003	OBJECTIVES	Prevention of R134a MAC system to be retrofitted with R12 (CFC-12) (reverse retrofitting)
	MAC Inspection	TARGET GROUP	PUSPAKOM, RTD and DOE State Offices Commercial and Private car owners
		IMPACT	Reduction of CFC-12 consumption in MAC service sector and increase awareness of vehicle's owners
	DESCRIPTION	STATUS/REMARKS	
1	Development of a Standard Inspection Training Manual (SITM)	<ul style="list-style-type: none"> <li>• TOR/SOW agreed by WB and DOE in July 2003.</li> <li>• Global Mist Sdn Bhd was appointed as consultant in November 2003</li> <li>• The consultant was required to prepare the Standard Inspection Training Manual (SITM) which to be used by Puspakom, Road Transport Dept (RTD) and DOE.</li> <li>• Consultant was also required to produce stickers, pamphlet and awareness program for all commercial vehicles after each inspection in Puspakom</li> <li>• 1st draft of SITM received and discussion was held in December 2003</li> </ul>	
2	Amendment to Environmental Regulation (Refrigerant Management) 1999 and other regulations under Road Transport Act /RTD	<ul style="list-style-type: none"> <li>• Cabinet paper to propose of Refrigerant Management amendment has been sent to MOSTE in Nov. 2003 for cabinet minister's approval.</li> </ul>	

NO	CY2003	OBJECTIVES	Build technical capacity of custom officials to inspect the import of ODS
	Custom ODS Training Program	TARGET GROUP	Custom officials and DOE State Officers
		IMPACT	Strengthen effectiveness of import control system of CFC
	DESCRIPTION	STATUS/REMARKS	
1	Development of a Custom-ODS Training Manual (COTM) and Course	<ul style="list-style-type: none"> <li>• In May 2003, DOE initiated discussion with the Customs Department and AKMAL to develop Custom ODS Training Program.</li> <li>• Top Tier Sdn Bhd was appointed as consultant in Aug 2003.</li> <li>• Drafted COTM discussed in December 2003 during working group meeting with Customs Department, AKMAL and DOE.</li> </ul>	

**Table 4: Industry Actions (Sub Project) carried in CY 2003**

NO	CY2003	OBJECTIVES	Increase technical capacity of the MAC service workshops
	Certification of ATC (Train the Trainer Prog.) Certification of Technician MAC Service Workshop	TARGET GROUP	Authorized Training Centers (ATC) and MAC service Workshops
		IMPACT	Reduction of CFC-12 consumption in MAC service and proper handling and good workshop practice
	DESCRIPTION	STATUS/REMARKS	
1	Certification of ATC Train-the-Trainer Program (TTP)	<ul style="list-style-type: none"> <li>• Group coordinator (GC) was appointed as consultant in March 2003.</li> <li>• GC was selected for the period of 2003-2006 to carry out activities under MAC Servicing Sector. Acquisition of equipment was established in November 2003.</li> <li>• 30 qualified ATC replied and have been identified by GC and DOE via the news paper advertisement.</li> <li>• A meeting with 350 car air-conditioning servicing workshops was organized in October 2003.</li> <li>• 30 ATC signed LOC in December 2003.</li> <li>• 4 days training for ATC was planned to be conducted early 2004</li> <li>• Additional fund requested USD 279,30.00 plus USD 110/workshop as incentive fees.</li> <li>• Each ATC should be represented by at least 2 service technicians and will received 2 sets of MAC Basic tools and R&amp;R Machines.</li> </ul>	

NO	CY2003	OBJECTIVES	To reduce amount of ODS used in manufacturing Industry process
	Phasing out CFC via Conversion to non-CFC	TARGET GROUP	SME (Manufacturing Industries)
		IMPACT	Phase out the use of CFC113, TCA 111 and CTC in SMEs
	DESCRIPTION	STATUS/REMARKS	
1	Identification of remaining users of CFC 113, TCA 111 and CTC	<ul style="list-style-type: none"> <li>• Consultant appointed in July 2003 to conduct survey and find remaining CFC users in SME (Manufacturing).</li> <li>• 2 eligible SMEs identified and report was endorsed by DOE</li> </ul>	

NO	CY2003	OBJECTIVES	To phase-out the use of CFC 11 in the manufacturing of polyurethane foam and conversion to non CFC process
	Conversion to non ODP In the FOAM Manufacturing Inds.	TARGET GROUP	SMEs manufacturing foam, cold rooms, bonded trucks, boats, cushions, refrigeration systems, etc.
		IMPACT	Reduction of CFC 11 in manufacturing process
	DESCRIPTION	STATUS/REMARKS	
1	Preparation of proposal for SME and identifying the manufacturer of foam	<ul style="list-style-type: none"> <li>• Consultant was appointed in January 2003</li> <li>• 14 SMEs (Group Project) were identified for financial assistance</li> <li>• 23 (18 + 5) SMEs (Individual Project) were identified and project proposal was prepared by consultant</li> <li>• Discussion with 14 SMEs and suppliers took place in September 2003</li> <li>• 4 out of 6 qualified suppliers were identified in 2003</li> </ul>	

NO	CY2003	OBJECTIVES	To provide Government with necessary support to carry out all activities proposed under this plan
	Project Management Unit	TARGET GROUP	DOE
		IMPACT	Strengthen capacity of Government to carry out the NCFCP to ensure timely and effective preparation and execution of the project activities
	DESCRIPTION	STATUS/REMARKS	
1	Set up of PMU	<ul style="list-style-type: none"> <li>• DOE advertised in local news paper and websites to recruit 4 staff members: Technical Officers (2), Public Outreach Officer, and Project Accountant.</li> <li>• Interviews were conducted in October 2003.</li> <li>• Expected start of work in January 2004</li> </ul>	
2	Public Awareness Activities	<ul style="list-style-type: none"> <li>• DOE organized a National ODS Seminar in July 2003. DOE also jointly organized seminars and workshops on RAVH Refrigerant Conference with MASHRAE (Dec. 2003), 3 Series of Hand-on Training on Chillers Refrigerant (CRTM) with MASHRAE, an HCFC Technologies Seminar with JICOP (October 2003), a Roundtable Meeting with 350 car servicing workshops (Oct. 2003), Training on Refrigerant and Halon Management Regulations for Petronas staff (June 2003), celebration on International Ozone Day by disseminating information on NCFCP and on Government policy to relevant stakeholders.</li> </ul>	
3	Regulatory Support	<ul style="list-style-type: none"> <li>• Actions regarding regulatory requirements were discussed among relevant agencies. An amendment of the Refrigerant Management Regulation (1999) was approved by the NSC and the Environmental Council in August 2003. A cabinet paper has been sent to MOSTE for approval.</li> </ul>	

## 4. GOVERNMENT ACTION

### 4.1 Project Management Unit (PMU)

16. In early 2003, DOE initiated a process to establish a Project Management Unit (PMU) comprising of the following 4 staff: Technical Officers (2), Public Outreach Officer/Strategic Communication Officer (1), and Accountant Officer (1). TOR for these service experts were approved and the experts have been selected in line with the Bank procurement guidelines for consultants. The advertisement was published in local news paper and website in August 2003, interviews were conducted in October 2003, and the PMU started functioning in January 2004.

### 4.2 Regulatory Actions

17. Based on the National CFC Phase-out Plan (NCFCP) 2002-2010, the Government undertook a number of regulatory actions as part of the NCFCP. These actions included:

- (a) Control of CFC consumption, 111-TCA, and CTC;
- (b) Monitoring of compliance to those enterprises that received funding from MLF in all the sectors (aerosol, foam, refrigeration, MAC, others),
- (c) Control the use of CFC in foam and MAC manufacturing, and
- (d) Prohibit the use of 111-TCA and CTC in solvent. Procedures for monitoring and enforcement will be established. Training workshops will be provided to Government officials to carry out the tasks.

Government activities carried out in CY2003 are summarized below.

No	POLICY / ACTIVITY PLANNED	SCHEDULE OF IMPLEMENTATION	STATUS
1.	Control of import quota through AP system <sup>1</sup>	January -December 2003	Import control policy in place and in operation since 2000
2.	Announcement of Import Quotas for CFCs from 2002-2010 <sup>2</sup>	December 2001	Announcement of import quotas for 2003 was done in December 2002
3.	Criteria and procedures for financial support for investment projects <sup>2</sup>	January-December 2003	Completed for foam sub-sector.  Revised appraisal report for 14 SME under foam phase-out project approved by WB on 12 January 2004.  Revised appraisal for 7 of 18 individual foam projects

<sup>1</sup> 2003 Performance Target

<sup>2</sup> 2004 Performance Target

			submitted to WB on 19 <sup>th</sup> Feb 2004.  5 new projects proposal being revised by CETEC.
4.	National ODS Seminar	31 July 2003	Completed.  Attended by 400 participants.
5.	Training on Chiller and Refrigerant Management (CRM),	21-22 March 2003 26-27 August 2003 16-17 December 2003	Completed. 60 chiller operators and high rise building owners received training certificate.
6.	Training Course on Refrigerant and Halon Management Regulations	13 June 2003	Completed.
7.	HCFC Technologies Seminar	23 October 2003	Completed.  Jointly organized with JICOP. Attended by 150 participants.
8.	Roundtable Discussion on Car Air-Cond. Servicing Workshops.	22 October 2003	Completed.  Attended by 350 MAC service workshops.
9.	Celebration the International Ozone Day	16 September 2003	Completed
10.	RAVH International/ Refrigeration and Air Conditioning Conference	24-25 September 2003	Completed
11.	Exhibition on RAVH Conference	23-26 September 2003	Completed
12.	Advertisement for invitation of qualified R & R MAC supplier and 30 ATC.	16 October 2003	Completed
13.	Publication and printing for NCFCP, sunshade, 2004 Calendar and ODS Folder for awareness program.	September-December 2003	Completed
14.	Updated WWW ODS Information	August-November 2003	Completed

## 5. BUDGET AND FINANCIAL PERFORMANCE IN 2003

Table 5: Financial performance 2003

No.	Activity	Planned Expenditure (USD)	Actual Expenditure (USD)
1.	Conversion of Seasonair sub-project	0	550,890
2.	Conversion in Foam/commercial refrigeration Sectors	1,000,000	14,000
3.	MAC servicing --Train-the-Trainer	319,000	0
4.	MAC servicing -- Financial subsidy	100,000	0
5.	MAC – Mandatory training	120,000	0
6.	Conversion in solvent sector	100,000	0
7.	Refrigeration --Train-the-Trainer	0	0
8.	Refrigeration --Financial subsidy	0	0
9.	TA for MDI	25,000	0
10.	Custom training	100,000	4,211
11.	PMU	300,000	45,026
	<b>TOTAL</b>	<b>2,064,000</b>	<b>614,127</b>



## PART II - 2004 ANNUAL PLAN

### 1. TARGETS

**Table 6: National Targets**

Target (ODP Tons)					
Indicators		Preceding Year (2003)	Year of Plan (2004)	Reduction from previous year	
Supply of ODS	Max. allowable import	1,619	1,189	430	
	Actual imports (2003) or planned imports (2004)	1,472	1,124	495	
Demand of ODS projected in NCPP	Manufacturing	198	50	148	
	Servicing	1,274	1,074	200	
	<b>Total</b>	<b>1,472</b>	<b>1,124</b>	<b>348</b>	

### 2. INDUSTRY ACTION

**Table 7: Industry Targets**

Sector	Consumption Preceding Year 2003 (ODP MT)	Target Consumption Year of Plan 2004 (ODP MT)	Reduction Within Year of Plan	Number of Projects Completed	Number of Servicing Related Activities	ODS Phase-out (ODP tonnes)
<b>Manufacturing</b>						
Aerosol			5	2		5
Foam			143	22		143
Refrigeration			---	---		---
Solvents			---	---		---
Other			---	---		---
<b>Subtotal</b>	<b>198</b>	<b>50</b>	<b>148</b>	<b>24</b>		<b>148</b>
<b>Servicing</b>						
Refrigeration and air conditioning	1,274	1,074	200	-	8	
<b>Subtotal</b>	<b>1,274</b>	<b>1,074</b>	<b>200</b>	<b>-</b>	<b>8</b>	<b>200</b>
<b>GRAND TOTAL</b>	<b>1,472</b>	<b>1,124</b>	<b>348</b>	<b>24</b>	<b>8<sup>1</sup></b>	<b>348</b>

<sup>1</sup> Eight activities are (i) Operation of MASHRAE Project, (ii) Chiller Replacement/Retirement, (iii) Retirement of CFC-12 Domestic Refrigerators, (iv) Retirement of CFC-12 Refrigerator Containers, (v) New Vehicle Inspection Requirement Upgrading Capacity of Inspection Stations, (vi) Train-the-Trainer Program and Certification of MAC Service Technicians, (vii) Financial Subsidy for R&R Machines; and (viii) Customs OPD Training Program.

### **3 TECHNICAL ASSISTANCE ACTIVITIES PLANNED**

#### **3.1 MDI Program**

18. The final draft of the National Transition Strategy for the Phaseout of CFCs in the MDI sector has been circulated by the National Pharmaceutical Control Bureau (NPCB) to all Working Group (WG) members. A meeting was organized in January 2004 to finalize the report before the start of implementation, and a working group meeting was held in March 2004. In addition, the NPCB organized an Awareness Seminar on CFC-free MDIs in May 2004, as well as a brain-storming session, to finalize the strategy report before it was officially circulated to public. A seminar/workshop and a series of road shows, as well as the publishing of healthcare awareness information, will also be conducted by NPCB in September-December 2004.

#### **3.2 MAC Inspection Program (PUSPAKOM)**

19. The second draft of the Standard Inspection Training Manual (SITM), prepared by Global Mist Sdn Bhd, was submitted to DOE in January 2004. Meetings were held in January 2004 to finalize the SITM, and a final draft was submitted to DOE in February 2004. Three hundred (300) copies of the SITM were printed, to be used during training sessions. Printing of pamphlets and stickers was completed in June 2004.

20. To date, 10 series of training sessions using RI units and the SITM have been completed. Besides PUSPAKOM officers, Road Transport Dept (RTD) and DOE State Offices were also trained during these sessions. Comments received during sessions have provided an opportunity for DOE to improve the implementation of refrigerant inspection regulation and enforcement. DOE has proposed that a MAC test be included in the road-test exhaust inspection.

21. Twenty (20) of the 40 RI units that were purchased in December 2003 have been distributed to PUSPAKOM and DOE State Officers. The technical assistance portion of the project is completed. Forty (40) additional RI units will be purchased under the program and will be distributed to Puspakom, RTD and DOE State Offices by September 2004.

#### **3.3 Custom-ODS Training Program (COTP)**

22. Four (4) series of Customs ODS Training Programs (COTP) will be jointly organized by AKMAL/DOE in 2004. Twenty (20) RI units were given to the Customs Department in April 2004. By the end of 2004, more than 100 Customs and DOE officers are expected to be trained on the use of RI units and the COT Manual. 300 copies of COTM in dual languages have been printed, and were used for the first series of COTP in April 2004. Approximately 35 Custom and DOE officers attended the training, which was held at AKMAL, Melaka. A second COTP will be held in September 2004. Forty (40) additional RI units will be purchased under the program and will be distributed to Customs and DOE State Offices by September 2004.

### **4 INDUSTRY ACTION (SUB PROJECT)**

#### **4.1 MAC Servicing Sector**

##### **Certification of ATC – Train the Trainer Program (TTP)**

23. A four-day (4) training program was conducted by the Group Coordinator (GC) in January 2004. Each Authorized Training Center (ATC) was represented by 2 qualified individuals who attended the training session. The training described the NCFCP and the TTP in detail, provided hands-on technical training on the use of R&R units, MAC Service Tools, RI units, and a theoretical and practical test. A MAC training manual was distributed

during training. The training was also attended by DOE officers. The training report was submitted to DOE by the consultant in February 2004.

#### Procurement of Equipment (R & R CFC 12 and MAC Tools)

24. The voucher program started in February 2004, and all ATCs received a voucher for USD 8,280. ATCs were required to use the vouchers within the following two months, as their expiration date was April 2004. The GC assisted DOE with the coordination of the distribution of vouchers and the procurement of equipment, which started in April 2004. The GC also participated in the distribution of MAC service tools kit, and R&R units. The process of procurement, distribution, installation and commission was completed in June 2004. The total cost of procurement was USD 248,400, which was disbursed in early July 2004.

#### Certification of Service Technician Program (CSTP)

25. After the ATC certification program was completed, ATCs signed Letters of Commitment (LOC) with DOE, in which they agreed to conduct Train the Trainer (TTP) and Certification of Service Technician Programs (CSTP). These programs consist of three stages;

- a) Registration of MAC Service Workshops – ATCs must register as many workshops within their region as possible, and later send the listing of registered shops to GC/DOE. Registration and survey forms were prepared and distributed to ATCs by DOE in April 2004. These forms are to be filled by MAC service shops for verification purposes. After the registration process is completed, ATCs will conduct training of service technicians, according to stipulated procedures. The GC and DOE/PMU will assist ATCs during training, as part of monitoring process.
- b) Verification/Selection Process – The objective of this process is to verify the eligibility of service workshops to receive NCFCP subsidies. Each registration form will be reviewed and all eligible workshops will be visited for verification purposes before vouchers are distributed. Verification and selection procedures are carried out by DOE.
- c) Voucher Subsidy/Procurement – Subsidies for basic tools will be given to all 3,000 service workshops. Only 1,000-1,500 eligible service workshops will receive subsidy for R&R units.

26. In March 2004 each ATC received copies of the guidelines and procedures for training, a MAC Training Manual, registration forms, a voucher entitlement survey (i.e. registration) form and a copy of the Malaysia-NCFCP. Posters of “the Code Good Work Practice” and of the “Standard Operating Procedure of R&R/MAC tools” were also distributed to all ATC/MAC workshops during training seasons.

27. GC, DOE and ATCs have jointly organized road-shows on TTP/CSTP. The objective of the road-shows is to clarify details about the NCFCP program, including the subsidy component, as well as to promote compliance with the Refrigerant Management Regulation of 1999. The first road-show was conducted in Seremban, Negeri Sembilan in March 2004 and was attended by approximately 40 participants from MAC Servicing workshops. A second road-show was held in Melaka in April 2004.

28. Three (3) additional road-shows have been conducted in Shah Alam, Selangor and in Penang in May 2004. A total of 200 service technicians from various MAC workshops around the Kuala Lumpur/Klang Valley, Selangor and Penang attended the half-day seminar.

29. A few additional road-shows are expected to be conducted in the Northern and Southern regions of the country, depending on the number of service workshops registered and depending on requests by ATCs. It is estimated that 3,000 car service workshops will participate in the CSTP by the end 2005.

30. By August 2004, 44 CSTP sessions have been conducted by ATC/GC/DOE in various locations around Malaysia. 1,300 technicians and service workshops have participated in

training workshops/CSTP. Certificates and vouchers for MAC service tool kits were distributed to those who participated and passed the CSTP in July 2004. Distribution of vouchers for R&R units is expected to begin in early November 2004.

#### **4.2 ODS Solvent Study**

31. Two eligible SMEs have been identified (Seasonair Sdn Bhd and Malayawata Sdn Bhd), with a consumption of 8.58 MT of CFCs. Letters were sent to both companies in February 2004, and the companies were visited in February and May, respectively, to request additional information on the technology in use, levels of consumption and potential costs of conversion. Project proposal for financial assistance (for Seasonair Sdn Bhd) to phase out its ODS solvent consumption was prepared by PMU staff and sent to Seasonair for final comments. Final proposal will be sent to CETEC for appraisal in November 2004. Projects are expected to be completed by mid of 2005.

32. Additional letters were sent 2 potential solvent suppliers to request information on clients who may be eligible for financial assistance under the NCFCP. In June 2004, DOE held meetings with 2 main suppliers of 1,1,1 TCA/CFC to discuss and promote non-ODS solvent alternatives technologies. Letters were sent in July 2004 to those suppliers to remind them of their commitment to provide list of potential industries that still consume 1,1,1 TCA.

#### **4.3 Foam Phase-Out Project**

33. **Group project** - Vouchers in the amount of USD 7,500 were distributed to 14 foam SMEs participating in the project in January 2004. The total cost for conversion of the 14 SMEs was USD 105,000 and the phase out achieved was 10.25 MT of CFCs. Final verification and monitoring was conducted by DOE/GC/CETEC in June-July 2004. The project was completed in July 2004.

34. **Individual projects** - Appraisal of 18 identified individual projects was completed in February 2004. Estimated costs of conversion were USD 866,630 with a total phase out 100.14 MT. Five additional projects were appraised by May 2004, with an estimated cost of USD 202,241 and a phase out of 32.11 MT. A half-day seminar on CFC Phase out in Foam sector and a signing ceremony for individual projects (attended by 22 of the 23 industries) was conducted in June 2004. All 23 projects are expected to be completed by the end of 2004.

#### **4.4 Commercial Refrigeration Servicing Sector (CRSS)**

35. A concept paper on the objectives of the CRSS program was prepared by PMU/DOE, along with TOR for a GC. A potential consultant (GC) will be identified to assist DOE in developing the program. The program is expected to begin in January 2005.

#### **4.5 Project Management Unit (PMU)**

36. PMU operations started in January 2004. Several public awareness events have been arranged and are expected to take place in 2004 including road-shows, media advertisement, posters and others. It is estimated that USD 223,368 will be disbursed in PR-related activities by the end of 2004.

37. A summary of all Technical Assistance activities and Industry Actions that are planned for 2004 is included in the following tables:

**Table 8: Technical assistance activities that will be carried out in CY 2004**

NO	(CY2004) PROPOSED ACTIVITY	OBJECTIVES	To increase awareness on CFC MDI transition plan
	CFC in MDI Sector	TARGET GROUP	Pharmaceutical Association, Doctors, MDI Importers, and Patients
		IMPACT	To promote the use of non-CFC MDI
	DESCRIPTION	STATUS/REMARKS	
1	Selection of consultant Development of strategy	<ul style="list-style-type: none"> <li>• NPCB appointed by DOE to do the survey/research. The final draft on National Transition Strategy to Phase Out CFC in MDI has been circulated by NPCB to WG members.</li> <li>• WG met in January 2004 and March 2004 to finalize the report before actual implementation of work, as required in TOR.</li> <li>• Workshop and series of road shows awareness program, as well as printing of health care awareness information, will be conducted by NPCB in September-December 2004.</li> <li>• A seminar was organized by NPCB in May 2004. 500 copies on National Strategy document will be published in September 2004.</li> </ul>	

NO	(CY2004) PROPOSED ACTIVITY	OBJECTIVES	Prevention of R134a MAC system to be retrofitted with R12 (CFC-12) (reverse retrofitting)
	MAC Inspection	TARGET GROUP	PUSPAKOM, RTD and DOE State Offices' Commercial and Private car owners
		IMPACT	Reduction of CFC-12 consumption in MAC service sector and increase awareness of vehicle's owners
	DESCRIPTION	STATUS/REMARKS	
1	Development of a Standard Inspection Training Manual (SITM)	<ul style="list-style-type: none"> <li>• DOE appointed consultant to prepare SITM and publish awareness materials. 300 SITM have been published. 2000 stickers and 3,000 pamphlets on MAC requirement inspection also have been printed and distributed.</li> </ul>	
2	Amendment to Environmental Regulation (Refrigerant Management) 1999 and other regulations under Road Transport Act /RTD	<ul style="list-style-type: none"> <li>• Cabinet paper to propose of Refrigerant Management amendment has been sent to NRE in August 2004 for Cabinet Minister's approval.</li> </ul>	
3	Procurement of equipment and delivery	<ul style="list-style-type: none"> <li>• First batch of RI (40 units) delivered to PUSPAKOM, Custom and DOE State Offices in April 2004.</li> <li>• Advertisement to procure for the second batch of RI units (80) was published in 16 May 2004 and suppliers were selected in June 2004. RI units will be delivered to Customs, DOE, AKMAL and RTD by September 2004.</li> </ul>	

NO	(CY2004) PROPOSED ACTIVITY	OBJECTIVES	Build technical capacity of custom officials to monitor the import of ODS
	Customs Training Program	TARGET GROUP	Custom officials and DOE State Officers
		IMPACT	Strengthen effectiveness of import control system of CFC
	DESCRIPTION	STATUS/REMARKS	
1	Development of a Custom-ODS Training Manual (COTM) and Course	<ul style="list-style-type: none"> <li>DOE initiated discussion with the Customs Department and the Custom Training Center (AKMAL) to organize 4 Custom ODS Training Programs (COTP) for 2004.</li> <li>300 copies of COTM were printed and used in the first Customs-ODS Training in April 2004. 2<sup>nd</sup> COTP will be conducted in September 2004.</li> </ul>	
2	Training and Procurement of equipment	<ul style="list-style-type: none"> <li>4 series of training will be conducted by AKMAL/DOE in April, September, November and December 2004, during which, 100 officers from Customs and DOE are expected to be trained on the use of RI units.</li> <li>20 RI units procured under the MAC Inspection Refrigerant Program were given to Customs use for monitoring illegal imports of CFC.</li> <li>25 RI units from the second batch of 80 units purchased will be given to Customs. The remaining units will be given to PUSPAKOM (20 units), DOE (30 units) and RTD (5 units).</li> </ul>	

**Table 9: Industry Action (Sub Project) that will be carried out in CY 2004**

NO	(CY2004) PROPOSED ACTIVITY	OBJECTIVES	Increase technical capacity of the MAC service workshops
	Certification of ATC (Train the Trainer Program) Certification of MAC Service Workshop Technicians	TARGET GROUP	Authorized Training Centers (ATC) and MAC service Workshops
		IMPACT	Reduction of CFC-12 consumption in MAC service, proper handling and good workshop practice
	DESCRIPTION	STATUS/REMARKS	
1	Certification of ATC Train-the-Trainer Program (TTP)	<ul style="list-style-type: none"> <li>80 service technicians from 30 ATC and DOE staff attended the training on application of MAC tools/manual and R &amp; R in January 2004.</li> <li>Equipment vouchers were distributed to 30 ATCs in February 2004. The expiry date of vouchers was April 2004.</li> <li>All 30 ATC are expected to conduct training of 3,000 MAC service workshop technicians by 2006. It is expected that 1,500-1800 car workshops will have participated in CSTP by the end of 2004. To date 1300 service technicians and MAC service workshops have participated in CSTP.</li> </ul>	
2	Procurement of Equipment (R&R and MAC Service tool)	<ul style="list-style-type: none"> <li>Procurement, training, installation and commissioning of R &amp; R and MAC tools was completed in June 2004</li> </ul>	
3	Certification of Service Technician Program (CSTP)	<ul style="list-style-type: none"> <li>3,000 service workshop will receive the basic tools (R 134a tools) and about 1,000-1,500 service workshop will receive R&amp;R subsidy. To date, voucher for MAC tools were sent to 600 MAC service workshops that have attended and passed CSTP.</li> <li>Verification, inspection and selection for workshops and voucher for R &amp; R will be carried out in September 2004.</li> </ul>	

NO	(CY2004) PROPOSED ACTIVITY	OBJECTIVES	To reduce amount of ODS used in manufacturing Industry process
	Phasing out CFC via Solvent	TARGET GROUP	SME (Manufacturing Industries)
		IMPACT	Phase out the use of CFC-113, 1,1,1 TCA and CTC in SME
	DESCRIPTION	STATUS/REMARKS	
1	Identification of remaining users of CFC 113, 1,1,1TCA and CTC	<ul style="list-style-type: none"> <li>• Consultant hired to conduct survey and determine remaining CFC users in SME Manufacturing Industry.</li> <li>• 2 SMEs were identified, Seasonair and Malayawata, and site visits were made to the enterprises in February and May, 2004.</li> </ul>	
2	Preparation of proposal	<ul style="list-style-type: none"> <li>• Letters were sent to Seasonair and Malayawata requesting information on substance used and on potential technological conversion.</li> <li>• Letters to suppliers were sent requesting for information of clients users of ODS solvent in their manufacturing process.</li> <li>• Meeting with 2 ODS Solvent suppliers held in June 2004. Draft proposal for financial assistant (Season Air Sdn Bhd) has been prepared by PMU and sent to the company for final comments.</li> </ul>	

NO	(CY2004) PROPOSED ACTIVITY	OBJECTIVES	To phase-out the use of CFC 11 in the manufacturing of polyurethane foam and conversion to non CFC Process
	Conversion to non ODP In the FOAM Manufacturing Inds.	TARGET GROUP	SME in manufacturing of FOAM, cold rooms, bonded trucks, boats, cushions, refrigeration systems etc.
		IMPACT	Reduction of CFC 11 in Manufacturing process
	DESCRIPTION	STATUS/REMARKS	
1	Preparation of proposal for SME and identifying the manufacturer of foam	<ul style="list-style-type: none"> <li>• 14 SMEs (Group Project) were identified for financial assistance and 23 Industries (Individual Project) proposals were received by DOE in January 2004.</li> <li>• Vouchers for procurement of equipment and training for 14 SMEs were distributed in January 2004. Final monitoring was conducted in June-July 2004. Group Project was completed in July 2004.</li> <li>• The signing ceremony for 22 individual projects was conducted in June 2004. The projects expected be completed by the end of 2004.</li> </ul>	

NO	(CY2004) PROPOSED ACTIVITY	OBJECTIVES	To provide Government with necessary support to carry out all activities proposed under this plan
	Project Management Unit	TARGET GROUP	DOE
		IMPACT	Strengthen capacity of Government to carry out the NCFCP to ensure timely and effective preparation and execution of the project activities
	DESCRIPTION	STATUS/REMARKS	
1	Set up of PMU	<ul style="list-style-type: none"> <li>PMU was established and started operations in January 2004.</li> </ul>	
3	Public Awareness Activities	<ul style="list-style-type: none"> <li>NOU/PMU staff attended the following meetings: Meeting on Awareness and Communication Strategy (Jan. 2004, Manila), Informal consultation on MB (March, 2004 Buenos Aires), Extraordinary Meeting on MOP (March, Montreal), Financial Intermediary Meeting (April, 2004, Washington), 2004 SEAP Network and Customs ODS Meeting (April 2004, Agra &amp; Nov. 2004, Phnom Penm), NCFCP Work Program Meeting (May 2004, Hanoi), HCFC Alternatives Meeting (May 2004, Tokyo), 24<sup>th</sup> OEWG Meeting (July, Geneva) and 16<sup>th</sup> MOP (Nov,Prague, Czech.).</li> </ul>	
4	Regulatory Support	<ul style="list-style-type: none"> <li>Actions regarding regulatory requirements were discussed among relevant agencies. An amendment of the Refrigerant Management Regulation (1999) has been approved by the NSC and the Environmental Council. A cabinet paper has been sent to NRE for approval.</li> </ul>	

## 5. GOVERNMENT ACTION

### Verification of the ODS Consumption Level and Financial Audit.

38. The Government commissioned a consumption verification report. The report was sent to the National Audit Department (NAD), where a process of verification and audit will take place. The endorsed verification report will be sent to WB/ExCom by September 2004. The 2003 ODS import data was sent to the Ozone Secretariat in August 2004.

39. The 2003 financial report was sent to NAD in March 2004 for verification and auditing. The audit was carried out by NAD and a final report was received by DOE in June 2004.

### Mandatory Inspection Requirement of Commercial Vehicles

40. As an integral part of the NCFCP strategy to reduce the use of CFC in MAC servicing, the Government proposed to introduce a mandatory vehicle inspection, particularly for commercial vehicles. DOE initiated discussions with the Road Transport Department (RTD), and PUSPAKOM and an amendment of the existing regulations (RTD and DOE) may be needed. Discussions on the regulatory actions will continue and are expected to be finalized by the end 2004. DOE has appointed a consultant to carry out the preparation of the Standard Inspection Training Manual (SITM), which will be used as material in capacity building activities for Puspakom and DOE State Offices.

41. Under this program, DOE procured 40 RI units in Feb 2004. Hands-on training on the use of RI was conducted in January 2004. RI units were distributed to Customs, PUSPAKOM, RTD and DOE State Offices in March 2004. 10 series of hands-on training on SITM and RI use were carried out in April-May 2004. 70 officers from the PUSPAKOM and DOE participated in training activities.

42. Before September 2004, an additional batch of 80 RI units (under MAC Inspection and Customs-ODS Program) will procure and distribute to RTD, Customs, PUSPAKOM and DOE.



Chillers/Refrigeration Servicing Sector Program (CRSS)

43. TOR and SOW prepared and sent to WB on 20 August 2004 for approval. A Group Coordinator will be appointed to develop and carry out the CRSS program 2005-2007. A survey and inventory for chiller owners was carried out in July-August 2004. In addition, potential remaining industries that still use CFC in the commercial refrigerant sector will be identified and project proposals will be prepared before December, 2004 or early January 2005.

ODS Awareness Activities

44. DOE also plans to implement a number of regulatory actions related to ODS and to carry out public awareness activities to increase knowledge and awareness of the enterprises and the public of the government policies pertaining to completed phase out of CFC, TCA, and CTC.

45. Key activities for Government actions 2004 are summarized below.

NO.	POLICY/ACTIVITY PLANNED	SCHEDULE OF IMPLEMENTATION	STATUS
1.	Control import quota for CY2004 through AP system <sup>1</sup>	January-December 2004	Import control policy in place and in operation
2.	Verification of import quota for CY2003  Verification of Financial for CY2003	September 2004  June 2004	On going  Completed
3.	Announcement of Import Quotas for CFCs from 2002-2010 <sup>2</sup>	December 2002	The AP advisory Committee chaired by MITI met in January 2004.
4.	Criteria and procedures for financial support for investment projects <sup>2</sup>	January-December 2004	On-going for solvent and commercial refrigerator sub-sector
5.	Announcement of Mandatory MAC Inspection Requirement <sup>3</sup>	October - December 2004	On-going to amend Environment Quality (Refrigerant Management) Regulation 1999
6.	Update Yearly National Survey Uses of Methyl Bromide in QPS and non QPS activities	June-July 2004	Completed. Develop survey form and distribution. Survey carried out together with the Dept. of Agriculture. Only 10.01 MT MB imported for non QPS in 2003.
7.	Updated National Survey in Chiller Commercial Sector	July-August 2004	250 survey forms and remind letters to comply with EQ (Refrigerant Management)

<sup>1</sup> 2003 Performance Target

<sup>2</sup> 2004 Performance Target

<sup>3</sup> 2005 Performance Target



NO.	POLICY/ACTIVITY PLANNED	SCHEDULE OF IMPLEMENTATION	STATUS
13.	Develop Strategy – Ban the Import/Sale and Use CFC in the MAC and Refrigerator Sector.	November 2004 – September 2005	Identification of potential guideline/on-going discussion
14.	Seminar NCFCP/Conference /Training Workshop	<p>Awareness Seminar on CFC Free in MDI (9 May 2004)</p> <p>Seminar on Chemistry in Environmental Convention (11 may 2004)</p> <p>CRSS Training I (18-19 May 2004)</p> <p>Training Course on Ozone Protection for Custom Officers (22 May 2004)</p> <p>CRSS) Training II (25-25 August 2004)</p> <p>National ODS Seminar (28 Sept ember 2004)</p> <p>Seminar on Chillers Refrigerant Management (30 September 2004 )</p> <p>CRSS Training III (December 2004)</p>	<p>Completed. Attended by 60 officers from Pharmaceutical and Asthma Associations.</p> <p>Completed. Attended by 60 officers from universities and industries.</p> <p>Completed. Attended by 15 Chiller service contractors and DOE officers. Jointly organize with ODS Centre Sdn Bhd</p> <p>Completed. Attended by 45 Customs officers</p> <p>Completed. Attended by 8 chiller service contractors and DOE officers. Jointly organized with ODS Centre Sdn Bhd</p> <p>In celebration of the International Ozone Day, a seminar was jointly organized with Penang DOE State Office.</p> <p>Jointly organized with MASHRAE/IEM</p> <p>Jointly organized with ODS Centre Sdn Bhd</p>
15.	<p>MAC Servicing Sector Road Shows.</p> <p>Certification of Service Technician Program (CSTP)/Theory and Hands-on Practical Training for R &amp; R</p>	<p>March - November 2004</p> <p>May-November 2004</p>	<p>On-going. More than 5 road-shows on TTP are expected to be carried out by DOE.</p> <p>On going. To date, 1,300 service technicians and MAC workshop have participated in CSTP. Expected 1,800 MAC service technicians will be trained by the end 2004. Targeted 3,000 will participate in CSTP by the end of 2005</p>

NO.	POLICY/ACTIVITY PLANNED	SCHEDULE OF IMPLEMENTATION	STATUS
16.	<p>Final announcement in local news paper to stop use CFC in manufacturing sectors and invite to participate in NCFCP</p> <p>Announcement establishment ATC/CSTP</p>	<p>17 March 2004</p> <p>October 2004</p> <p>29 April 2004</p>	<p>Completed</p> <p>On going</p> <p>Completed</p>
17.	<p>Printing and Publication:</p> <ul style="list-style-type: none"> <li>*Pamphlet for Ozone Protection Section</li> <li>*MAC Service Sector Voucher Scheme</li> <li>*ODS Folder/kit</li> <li>*2004 ODS Calendar</li> <li>*NCFCP pamphlet</li> <li>*MAC Training Manual/ R &amp; R</li> <li>*Custom-ODS Training Manual</li> <li>*Standard Inspection Training Manual</li> <li>*Poster for Code of Good Work Practice-MAC</li> <li>*National Transition Phase out Strategy CFC in MDI</li> <li>*National MB Phase-Out Strategy</li> <li>*National Strategy and Action Plan for ODS Public Awareness</li> <li>*Pamphlet for MAC Inspection Requirement</li> <li>*Stickers for MAC Inspection Monitoring</li> <li>*Sticker for NCFCP Awareness</li> <li>*Pamphlet for List of MAC-ATC</li> <li>*Save Our Sky-ODS Bag/T shirt</li> <li>*Pamphlet for Ozone-MP for School Children/Public</li> <li>*Pamphlet for Standard Operating Procedure for MAC</li> <li>*ODS Bulletin</li> <li>*Document for MP Implementation in Malaysia</li> <li>*Ozone Corner</li> </ul>	<p>Jan 2004</p> <p>April 2004</p> <p>April 2004</p> <p>Jan 2004</p> <p>July 2004</p> <p>Jan 2004</p> <p>Feb 2004</p> <p>April 2004</p> <p>May 2004</p> <p>August 2004</p> <p>November 2004</p> <p>Oct 2004</p> <p>May 2004</p> <p>May 2004</p> <p>July 2004</p> <p>April 2004</p> <p>November 2004</p> <p>September 2004</p> <p>August 2004</p> <p>April, June, Sept, Dec 2004</p> <p>September 2004</p> <p>March, June, Sept, Dec 2004</p>	<p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>On going</p> <p>On going</p> <p>Completed</p> <p>Completed</p> <p>On going</p> <p>On going</p> <p>Completed</p> <p>On going</p> <p>On going</p> <p>On going</p>
18.	ODS Web site	February, April, June, Sept, Nov, Dec 2004	On going

## 5. BUDGET FOR 2004

No.	Activity	Planned Expenditures in 2004 (USD)
1.	Conversion of Seasonair sub-project	340,751
2.	Conversion in Foam/commercial refrigeration sectors	1,250,000
3.	MAC - Training for mandatory inspections	250,000
4.	MAC servicing --Train-the-Trainer	250,000
5.	MAC servicing -- Financial subsidy of basic tools	1,100,00
6.	MAC servicing -- Financial subsidy of R&R machines	0
7.	Conversion in solvent sector	300,000
8.	Refrigeration --Train-the-Trainer	0
9.	Refrigeration --Financial subsidy	0
10.	TA for MDI	50,000
11.	Custom training	134,000
12.	PMU – Operation	200,000
13.	PMU – PR	223,500
14.	PMU – Monitoring	100,000
	<b>TOTAL</b>	<b>3,098,251</b>

*Note: Funds remaining from the 2003 allocation will be used to cover activities proposed in the 2004 Annual Plan, since costs will exceed the 2004 allocation.*




**MALAYSIA ODS PHASE-OUT PROJECT : THE NATIONAL CFC PHASE-OUT  
PLAN (NCFCPP)  
PART I**

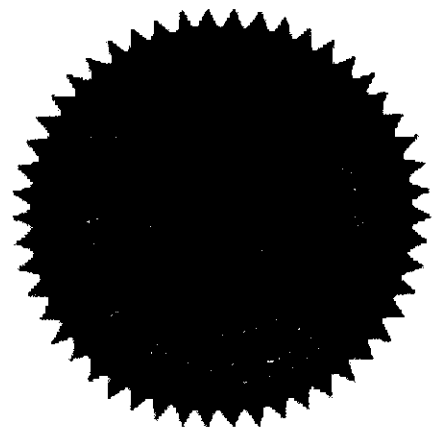
**REPORT OF CERTIFIED AUDITOR**

We have audited procedures for issuing import quota against the Application Import License executed by the Ministry of International Trade and Industry and import control executed by the Royal Customs Department including supporting documents to certify actual consumption (actual imports) of Annex A, Group I Chemicals (i.e. CFCs); 1,1,1-Trichloroethane (1,1,1-TCA); and Carbon Tetrachloride (CTC) for the period 1<sup>st</sup> January 2003 to 31<sup>st</sup> December 2003. These supporting documents are the responsibility of the concerned agencies, the Department of Environment (DOE), the Ministry of International Trade and Industry (MITI), the Royal Customs Department and the Statistics Department. Our responsibility is to express an opinion on these supporting documents based on our audit.

We conducted our audit in accordance with the Malaysian Approved Standards on Auditing to obtain reasonable assurance about whether the supporting document for issuing import quota against the Application Import License and import control are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and the type of these controlled chemicals that have been issued against the Application Import License and actually imported or exported for the year throughout 2003. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, these procedures and supporting documents can be fairly relied on to support imported amount of these controlled substances for the year throughout 2003 and they are adequately documented.

  
(NORRIZAN BT. TAHIR)  
FOR AUDITOR GENERAL  
MALAYSIA



23 September, 2004.

**A. Allowable Imported Level Of Controlled Substances As Permitted By  
MITI Under The AP System**

No.	Importer	CFC-11 (mt)	CFC-12 (mt)	CFC-113 (mt)	CFC-114 (mt)	CFC-115 (mt)	CC14 (mt)	1,1,1-TCA (mt)
1.	Chemquest Trading (M) Sdn. Bhd.	0	66.60	-	-	-	-	-
2.	Carto Sdn. Bhd.	17.00	0	-	-	-	-	-
3.	CCM Chemicals Sdn. Bhd.	28.00	78.00	-	-	-	-	35.00
4.	Daichem Enterprise (M) Sdn. Bhd.	59.74	89.50	-	-	-	-	-
5.	Aurora Chemicals Sdn. Bhd.	4.50	15.50	-	-	-	-	-
6.	Keylargo (M) Sdn. Bhd.	15.00	170.00	-	-	-	-	-
7.	Perusahaan Kimia Gemilang Sdn. Bhd.	39.45	76.78	-	-	-	-	10.00
8.	ST Chemicals Sdn. Bhd.	0	160.00	-	-	-	-	-
9.	Sing Swee Bee Sdn. Bhd.	8.00	58.28	-	-	-	-	-
10.	Tesway (M) Sdn. Bhd.	0	65.00	-	-	-	-	-
11.	Texcarrier Sdn. Bhd.	29.00	111.00	-	-	-	-	-
12.	Unigas Sdn. Bhd.	17.00	106.00	-	-	-	-	-
13.	Westech Sdn. Bhd.	9.20	305.80	-	-	-	-	-
14.	Globechem Sdn. Bhd.	-	30.00	-	-	-	-	-
15.	Nagase Sdn. Bhd.	-	7.00	-	-	-	-	20.00
16.	Kimia Pertama (M) Sdn. Bhd.	-	-	-	-	-	-	76.00
17.	Contingencies*	100.55	-115.88	3.00	-	21.00	11.50	336.00
<b>Total Quota (A)</b>		<b>327.44</b>	<b>1223.56</b>	<b>3.00</b>	<b>0</b>	<b>21.00</b>	<b>11.50</b>	<b>477.00</b>

**Note:**

\* Contingencies were set aside for applications for imports of Ozone Depleting Substances (ODS) by Government Department/Agencies. Importers may apply for additional quota and MITI can approve by using the contingencies quota if the quantity set aside has not being utilized by any Government Department/ Agencies.



**B. Actual Quantity Of Controlled Substances Imported During The  
Calendar Year 2003 (1<sup>st</sup> January 2003 – 31<sup>st</sup> December 2003)**

No.	Importer	CFC-11 (mt)	CFC-12 (mt)	CFC-113 (mt)	CFC-114 (mt)	CFC-115 (mt)	CC14 (mt)	1,1,1-TCA (mt)
1.	Chemquest Trading (M) Sdn. Bhd.	0	66.59	-	-	-	-	-
2.	Carto Sdn. Bhd.	0	0	-	-	-	-	-
3.	CCM Chemicals Sdn. Bhd.	28.00	63.12	-	-	-	-	0
4.	Daichem Enterprise (M) Sdn. Bhd.	59.74	89.49	-	-	-	-	-
5.	Aurora Chemicals Sdn. Bhd.	4.50	15.49	-	-	-	-	-
6.	Keyargo (M) Sdn. Bhd.	14.94	170.00	-	-	-	-	-
7.	Perusahaan Kimia Gemilang Sdn. Bhd.	39.45	64.02	-	-	-	-	10.00
8.	ST Chemicals Sdn. Bhd.	0	129.22	-	-	-	-	-
9.	Sing Swee Bee Sdn. Bhd.	8.00	58.28	-	-	-	-	-
10.	Tesway (M) Sdn. Bhd.	0	65.00	-	-	-	-	-
11.	Texcarrier Sdn. Bhd.	29.00	86.00	-	-	-	-	-
12.	Unigas Sdn. Bhd.	18.93	106.00	-	-	-	-	-
13.	Westech Sdn. Bhd.	9.20	305.07	-	-	-	-	-
14.	Globechem Sdn. Bhd.	-	29.97	-	-	-	-	-
15.	Nagase Sdn. Bhd.	-	7.00	-	-	-	-	0
16.	Kimia Pertama (M) Sdn. Bhd.	-	-	-	-	-	-	59.28
17.	Contingencies*	-	-	-	-	-	-	-
<b>Total Import (B)</b>		<b>209.76</b>	<b>1255.25</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>69.28</b>

Difference	CFC-11	CFC-12	CFC-113	CFC-114	CFC-115	CC 14	1,1,1-TCA
A-B	117.68	31.69	3.00	-	21.00	11.50	69.28

**C. Reconciliation**

	CFC-11	CFC-12	CFC-113	CFC-114	CFC-115	CC 14	1,1,1-TCA
Total Quota	327.44	1223.56	3.00	0	21.00	11.50	477.00
Total Import	209.76	1255.25	-	-	-	-	69.28
Reconciliation	117.68	31.69	3.00	0	21.00	11.50	407.72

#### D. Description Of Differences Of Quota And Actual Import

Unused quotas by importers and quantities reserved by MITI as "contingencies" make up the differences as follows:

No.	Importer	CFC-11 (mt)	CFC-12 (mt)	CFC-113 (mt)	CFC-114 (mt)	CFC-115 (mt)	CC14 (mt)	1,1,1-TCA (mt)
1.	Chemquest Trading (M) Sdn. Bhd.	0	0.01	-	-	-		-
2.	Carto Sdn. Bhd.	17.00	0	-	-	-		-
3.	CCM Chemicals Sdn. Bhd.	0	14.88	-	-	-		35.00
4.	Daichem Enterprise (M) Sdn. Bhd.	0	0.01	-	-	-		-
5.	Aurora Chemicals Sdn. Bhd.	0	0.014	-	-	-		-
6.	Keylargo (M) Sdn. Bhd.	0.06	0	-	-	-		-
7.	Perusahaan Kimia Gemilang Sdn. Bhd.	0	12.74	-	-	-		0
8.	ST Chemicals Sdn. Bhd.	0	30.78	-	-	-		-
9.	Sing Swee Bee Sdn. Bhd.	0	0	-	-	-		-
10.	Tesway (M) Sdn. Bhd.	0	0	-	-	-		-
11.	Texcarrier Sdn. Bhd.	0	25.00	-	-	-		-
12.	Unigas Sdn. Bhd.	0.07	0	-	-	-		-
13.	Westech Sdn. Bhd.	0	0.73	-	-	-		-
14.	Globechem Sdn. Bhd.	-	0.03	-	-	-		-
15.	Nagase Sdn. Bhd.	-	0	-	-	-		20.00
16.	Kimia Pertama (M) Sdn. Bhd.	-	-	-	-	-		16.72
17.	Contigencies*	100.55	-115.88	-	-	-		336.00
		17.13	31.69	3.00	0	21.00	11.50	407.72

**Note:**

- I. ST Chemicals Sdn. Bhd. (No. 8) has imported/used 29.64 metric tones in January 2004 out of the unused quota of 30.78 metric tones.

**MALAYSIA ODS PHASE-OUT PROJECT : THE NATIONAL CFC  
PHASE-OUT PLAN (NCF CPP)**

**1. INTRODUCTION**

- 1.1 At the 35<sup>th</sup> Meeting of the Executive Committee of the Multilateral Fund for the implementation of the Montreal Protocol (ExCom) in December 2001, the Government of Malaysia, through the Department of Environment (DOE), has received a grant fund to implement the Malaysia National CFC Phase-out (NCF CPP) for the phased reduction and complete phase-out of the consumption of Annex A, Group I Chemicals (i.e. CFC); 1,1,1-TCA; and Carbon Tetrachloride (CTC) in the country. The Malaysia NCF CPP aims to reduce the negative impacts of the enterprises in light of the world trend and regulatory actions by applying a combination of regulations, monitoring and financial assistance and the program will be implemented through the World Bank.
- 1.2 The ExCom has agreed in principle that it will provide funds to support the activities on an annual basis if the Malaysia NCF CPP completes the phase-out of the consumption of CFC; 1,1,1 – TCA; and CTC in the year 2010 and the maximum allowable consumption for CFC; 1,1,1-TCA; and CTC for the year 2003 are 1,566 ; 48 ; and 4.51 Ozone Depleting Potential metric tonnes (ODP mt) respectively. At the same time, the Government of Malaysia should ensure that the import control policy for ODS is in place and operational.

**2. ANNOUNCEMENT OF IMPORT QUOTAS FOR CFCS FROM 2002-2010**

The Government of Malaysia will announce import schedule for Annex A, Group I, chemicals for 2002-2010 within 12 months after funding for this national CFC phase out plan has been approved by the ExCom. No import licences will be given to new importers. The proposed annual quota will be

distributed among the 19 importers ( that is existing importers at the time imports of CFC was frozen on 7 April 1994) .

### **3. CRITERIA FOR FINANCIAL SUPPORT**

The National CFC Phase out Plan employs a phase out strategy based on a combination of policy and regulatory support. The National phase out plan requires enterprise to be proactive and apply for funds based on rules and guidelines, consistent with MLF funding principles.

To attain participation from the industry, the national CFC phase out plan proposes to utilise various incentives structures, including financial and regulatory incentives, designed with the aim of ensuring permanent and sustainable reduction of CFC phase out.

The national CFC phase out plan covers a number of sectors and sub-sectors with different profiles, The National CFC phase out plan also sets specific milestones to be achieved before MLF funds can be provided to Malaysia.

### **4. PROCEDURES FOR INVESTMENT PROJECTS COMPLETED AND DISTRIBUTED.**

The agreed implementation modalities for various sectors and sub-sectors are as follows :-

#### **4.1 GRANT FUNDING BASED ON AVERAGE COST-EFFECTIVENESS OF PREVIOUSLY MLF APPROVED PROJECTS FOR MALAYSIA OF RESPECTIVE SECTOR AND SUB-SECTOR.**

The following implementation and financing modalities will be applied to investment projects in the solvent (CFC-113,1,1,1-TCA), commercial refrigeration, and foam sectors.

- (a) Advertising and promotion of the MLF funding and CFC phase out program will be done through workshops, national newspaper and trade magazines. At these workshop, the project management unit (to be appointed by DOE) will provide training to enterprise on how to prepare projects proposals;
- (b) Enterprise that require technical assistance to identify suitable non-ODS alternatives, should submit their request to DOE.
- (c) All enterprise are invited to submit request for funding in line with the MLF guidelines. Priority will be given to the most cost-effective proposals.
- (d) Enterprises are required to submit their proposal before the end of 2003.
- (e) Funding priority should only be given to enterprise that were established before July 1995.
- (f) Each enterprise is required to provide detailed information regarding baseline situation and CFC consumption.

#### **4.2 PARTIAL GRANT FINANCING FOR PURCHASING OF REFRIGERATION AND MAC SERVICING TOOLS AND MAC R&R MACHINES**

This financing modality will be applied to all refrigeration and MAC service shops and partial grant funding approach will be employed. For those who participate early, a higher subsidy level will be provided to assist them in purchasing service tools for proper maintenance of CFC-12 and non-CFC refrigerators and MACs, and MAC recovery and recycling machines.

- (a) The project management team will undertake a selection process to identify qualified suppliers for providing service tools and MAC recovery

and recycling machines.

- (b) To qualify for financial assistance, service shops must have at least one of their technicians trained and certified at one of the training centres authorized by DOE. DOE will include names of certified technicians and service shops that they associate with into DOE's database.
- (c) Financial assistance should only be given to certified technicians.

#### **4.3 FULL GRANT FINANCING FOR TECHNICAL ASSISTANCE AND CAPACITY BUILDING COMPONENTS**

This financing modality will be applied technical assistance components, capacity building components, such as train-the-trainer programs, technical capacity building for vehicle inspection-stations, Customs training and other activities.

#### **4.4 OBSERVATION**

It is to be noted that paragraph 3, 4, 4.1, 4.2 and 4.3 were extracted from Malaysian National CFC Phaseout Plan (NCFCP) 2002-2010 dated July 2003.

### **5. PROCEDURES FOR AUDITING**

#### **5.1 Verification Of Process For Issuing Of Imports Quota For The Year 2003**

5.1.1 Audit examination on the process and controls of issuing import quota by MITI for the year 2003 were carried out and the following were noted :

- i. Prior to the issuance of the quota for the year 2003, the Industry Services Division (ISD) of MITI requested for confirmation on the Malaysia NCFCPP for the year 2002 to 2010 from DOE (MITI's

letter reference MITI:ID/ BDI/E(S) 664/22 Jld. 2 dated 12 June 2003 ). That was to ensure any latest amendments regarding allowable consumption level for Malaysia under the Montreal Protocol will be taken into consideration before decisions are made on the quota for the year 2003.

- ii. Quota for each importer was correctly tabulated and all importers notified of their quota by 17 December 2002.
- iii. The register/ledger to control the issuance of AP was maintained properly by TSD and up to date. Supervising officers has carried out regular checks on the register.
- iv. Importers had submitted their report on actual imports of ODS for the year to ISD.
- v. The report on the import of ODS for the year 2003 has been prepared and submitted to DOE.

5.1.2 From audit examinations, we are satisfied that MITI has proper controls and adhered to the procedures of issuing import quota and approval of the application import licence.

## **5.2 Verification Of Quotas Issued To Importers**

5.2.1 Verifications of quotas issued to the following 5 importers were carried out :

- i. ST Chemicals Sdn. Bhd.
- ii. Daichem Enterprise (M) Sdn. Bhd.
- iii. Aurora Chemicals Sdn. Bhd.
- iv. Westech (M) Sdn. Bhd.
- v. Keylargo (M) Sdn. Bhd.

5.2.2 As a result of audit verification, the following were noted :

- i. The quota for each importer was correctly computed and recorded in the register, with the exception to Daichem Enterprise (M) Sdn. Bhd. and Westech (M) Sdn. Bhd. Statement of CFC 12 Import Quota for the year 2003 (MITI 's Statement) differs greatly from Importers Declaration Form as appended below :

<b>Importer</b>	<b>MITI Statement (mt)</b>	<b>Importer Declaration Form (mt)</b>	<b>Difference between MITI Statement and Importer Declaration Form (mt)</b>
Daichem Ent. (M) Sdn.	74.00	89.488	15.488
Westech (M) Sdn. Bhd.	289.432	305.072	15.64

- ii. All additional quota or transfer of quota were approved by the ISD and duly recorded in the register.
- iii. Total quantities in AP approved by TSD for each importer do not exceed the importers's yearly quota.

### **5.3 Verification Of Customs' Records And Documentation From Importers**

5.3.1 The import of ODS by 5 importers as mentioned in paragraph 5.2.1 were verified to Customs' record and importers' documentation. Supporting documents verified are as follows:



i. **ST Chemicals Sdn. Bhd.**

No.	Type of Supporting Document Verified			Type of Controlled Substance	Quantity (mt)
	Declaration No.	Invoice No.	Bill of Lading No.		
1.	B10101013886	D-SC-011778	ICMUM 05148	CFC 12	7.4800
2.	B10102005430	D-Sc-011907	SSLMUM00448	CFC 12	7.4800
3.	B18102002653	3880	1450-4148-301.023	CFC 12	14.9600
4.	B18103002220	3896	1450-4148-302.020	CFC 12	14.9600
5.	B18103002221	3895	1450-4148-302.021	CFC 12	11.5700
6.	B10104005296	3935	MCS09060	CFC 12	14.9600
7.	B10105033448	3995	MCS09298	CFC 12	14.9600
8.	B18108005216	4076	1450-4148-307.025	CFC 12	11.5700
9.	B10109005320	IK- E920802/STC	KKLUSH8907744A	CFC 12	31.2800
<b>TOTAL QUANTITY (CFC - 12)</b>					<b>129.22</b>

ii. **Daichem Enterprise (M) Sdn. Bhd.**

No.	Type of Supporting Document Verified			Type of Controlled Substance	Quantity (mt)
	Declaration No.	Invoice No.	Bill of Lading No.		
1.	B10103014509	1253-1254/2556	SSLUMUM01090	CFC 11	9.0000
2.	B1810501140	EX/FCD/5028	APLU054183688	CFC 11	19.0400
3.	B1810800780	CS3F030181	KMTCSHA765251	CFC 11	18.0000
4.	B1011201755	EX/FCD/5272	MISCDEL00004772	CFC 11	13.7000
<b>TOTAL QUANTITY (CFC 11)</b>					<b>59.7400</b>
5.	B10104016763	CS3F03048	UNICB3128491	CFC 12	15.6400
6.	B 10105003320	092/2028/03-04	SSLMUM01635	CFC 12	15.6400
7.	B 10106003356	23WZHQ231	KMTCSHA310989	CFC 12	15.5040
8.	B18109010981	23WZQ403	KMTCSHA768298	CFC 12	13.6000
	B1010035572	23WHQ439	KMTCSHA320377	CFC 12	13.6000
9.	B18102001120	CSF04001	KMTCSHA779002	CFC 12	15.5040
<b>TOTAL QUANTITY (CFC 12)</b>					<b>89.4880</b>

iii. Aurora chemicals Sdn. Bhd.

No.	Type of Supporting Document Verified			Type of Controlled Substance	Quantity (mt)
	Declaration No.	Invoice No.	Bill of Lading No.		
1.	B10102009282	985-987/2432	SSLMUM00601	CFC 11	4.5000
<b>TOTAL QUANTITY (CFC 11)</b>					<b>4.5000</b>
2.	B18111010637	JN03CFC173	00LU84801890	CFC 12	4.1200
3.	B18111004671	JN03CFC172	00LU84800600	CFC 12	7.3032
4.	B10102009281	985-987/2432	SSLUMUM00601	CFC 12	4.0800
<b>TOTAL QUANTITY (CFC 12)</b>					<b>15.4904</b>

iv. Westech (M) Sdn. Bhd.

No.	Type of Supporting Document Verified			Type of controlled Substance	Quantity (mt)
	Declaration No.	Invoice No.	Bill of lading No.		
1	B10105013748	WES/REF/0035	KKLUBOM00902	CFC 11	9.2000
<b>TOTAL QUANTITY (CFC 11)</b>					<b>9.2000</b>
2	B18102006915	200000/03	GOAA066664	CFC 12	14.2800
3	B10104001313	WES/REF/0301	KKLUBOM008798	CFC 12	15.7760
4	B10103030668	ARCQ10303	MISCSHA000009026	CFC 12	15.6400
5	B10102009796	1069/2470/02-03	SSLMUM00603	CFC 12	16.3200
6	B18104005954	n. 200987	ANLU39100540	CFC 12	12.9200
7	B10104019098	WES/REF/0313	NHS/PKL/GL/0905	CFC 12	20.0000
8	B10105003590	12428	SIN-304190-PKL	CFC 12	14.9600
9	B18105002270	23WZHQ175	KMTCSHA756007	CFC 12	15.5040
10	B18106000700	00011302	CMAFF6618876	CFC 12	15.6400
11	B18106000700	00011302	CMAFF6618876	CFC 12	15.6400
12	B10105031722	WES/REF/0056	KKLUBOM010289	CFC 12	20.0000
13	B10107002428	12509	SBN-306219-PKL	CFC 12	14.9600
14	B18106009739	ARCQ12283	CMAMEXFF14214	CFC 12	31.2800
15	B10108001597	ARCQ12673	HASLNM70D737L14	CFC 12	15.6400
16	B10107027850	23WZHQ324	SHAPKL345425	CFC 12	15.5040
17	B10108034561	WES/REF/0145	NHS/PKL/GL/1437	CFC 12	20.0000
18	B10111031843	23WZHQ370	SHAPKL351206	CFC 12	15.5040
19	B10112023204	23WZHQ527	SHAPKL330495	CFC 12	15.5040
<b>TOTAL QUANTITY (CFC 12)</b>					<b>305.0720</b>

vi. Keylargo (M) Sdn. Bhd.

No.	Type of Supporting Document Verified			Type of Controlled Substance	Quantity (mt)
	Declaration No.	Invoice No.	Bill of Lading No.		
1	B18108010062	EX/FCD/5141	054185157	CFC 11	14.9400
<b>TOTAL QUANTITY (CFC 11)</b>					<b>14.9400</b>
2	B10112015102	EX/FCD/5307	MISCDEL000004942	CFC 12	14.9600
3	B10104021897	18493	KKLUSH8906160	CFC 12	15.6400
4	B10112015101	EX/FCD/5301	MISCDEL000004923	CFC 12	15.6400
5	B10109025279	19563	KKLUSH8907858	CFC 12	15.6400
6	B10108005428	19239	KKLUSH89047414	CFC 12	14.2800
7	B108027826	19376	KKLUSH8907582	CFC 12	15.6400
8	B105015751	EX/FCD/4987	RL/SSAD/0724	CFC 12	31.2800
9	B18106003174	20031836	SHASOLD061	CFC 12	15.6400
10	B18105011998	EX/FCD/5033	APLU 054183711	CFC 12	31.2800
<b>TOTAL QUANTITY (CFC 11)</b>					<b>170.0000</b>

## 5.4 Verification Of Department Of Statistics Record

5.4.1 Department of Statistics will key in (or down load) data from Customs record and a monthly report produced for submission to DOE. Basing on the report, DOE prepares data on imports using Data form 1 (UNEP/OZI.Pro/Dataform97). However there are discrepancies between total imports of ODS from reports by MITI and Department of Statistics. The discrepancies are shown below :

Type of Controlled Substance	Quantities Imported For The Year 2003		
	Department of Statistics record (kgs)	MITI's record (kgs)	Differences (kgs)
CTC	0	0	0
1,1,1-TCA	114,361.40	69,280.00	45,081.40
CFC 11	133,450.00	209,760.00	(76,310.00)
CFC 12	1,040,930.20	1,224,118.60	(183,188.40)
CFC 113	0	0	20.00
CFC 114 & CFC 115	0	0	0

5.4.2 Possible reasons for the discrepancies could be explained when audit verifications were carried out to ensure imports of ODS by the same 5 importers (paragraph 5.2.1) are correctly taken up in the Department of Statistics record. Two computer print-outs were provided by Department of Statistics for checkings. One was the record of manual data entries and the other, the down load of Customs computerized data. Audit verifications of Department of Statistics record revealed the following:

- i) 8 imports totaling 108.5640 metric tonnes were not captured in the Department of Statistics record. They are as follows :

No.	Importer	Declaration Form No.	Type of CDS	Quantity (mt)
1	Daichem Enterprisa (M) Sdn. Bhd.	B10103014509	CFC 11	9.0000
2	Daichem Enterprisa (M) Sdn. Bhd.	B10110035572	CFC 12	13.6000
3	Daichem Enterprisa (M) Sdn. Bhd.	B18102001120	CFC 12	15.5040
4	Aurora Chemicals Sdn. Bhd.	B10102009282	CFC 11	4.5000
5	Aurora Chemicals Sdn. Bhd.	B10102009281	CFC 12	4.0800
6	Westech (M) Sdn. Bhd.	B10105003590	CFC 12	14.9600
7	Keylargo (M) Sdn. Bhd.	B18106003174	CFC 12	15.6400
8	Keylargo (M) Sdn. Bhd.	B18105011998	CFC 12	31.2800
<b>Total Quantity</b>				<b>108.5640</b>

- ii) 5 imports totaling 69.234 metric tonnes was not appear in the monthly report but it was only captured by Department of Statistics in the finalizing report 2003 . They are as follows :

No.	Importer	Declaration Form No.	Type of CDS	Quantity (mt)
1	Westech (M) Sdn. Bhd.	B18104005954	CFC 12	12.9200
2	Westech (M) Sdn. Bhd.	B18105002270	CFC 12	15.5040
3	Westech (M) Sdn. Bhd.	B10108001597	CFC 12	15.6400
4	ST Chemicals Sdn. Bhd.	B18108005216	CFC 12	11.5700
5	Daichem Enterprise (M) Sdn. Bhd.	B 18109010981	CFC 12	13.6000
<b>Total Quantity</b>				<b>69.2340</b>

- iii) An import of 9.20 metric tonnes of CFC 11 by Westech (M) Sdn. Bhd. via Import Declaration form B10105013748 was erroneously captured by Department of Statistics as 3.60 metric tones.
- iv) An import of 31.28 metric tones of CFC 12 by ST Chemicals Sdn. Bhd. via Import Declaration form B10109005320 was erroneously captured by Department of Statistics as 15.64 metric tonnes.
- v) Audit checks on company files that import 1,1,1 -TCA kept in MITI reveals Kimia Pertama (M) Sdn. Bhd. via Import Declaration form B1010102660 purchased 19.76 metric tonnes in November 2002, but arrived in January 2003 . This amount is reflected in Statistics's record but not in MITI's Statement.

5.4.3 From the above audit examinations, we are of the opinion that DOE should not use secondary data from Department of Statistics report alone without verifications. As the monitoring agency, DOE should reconcile total quantities imported as reported by Department of Statistics and MITI. Further investigations should then be carried out for any discrepancy.

### Name of the Importers

No	Name of Importers	Type of Chemical Imported						
		CFC -11	CFC -12	CFC -113	CFC- 114	CFC -115	1,1,1- TCA	CT C
1	Chemquest Trading (M) Sdn. Bhd	-	X	-	-	-	-	-
2	Texcarrier Industries Sdn. Bhd.	X	X	-	-	-	-	-
3	Cosmo Polyurethane	-	-	-	-	-	-	-
4	Unigas (M) Sdn. Bhd.	X	X	-	-	-	-	-
5	Carto Sdn. Bhd.	-	-	-	-	-	-	-
6	Westech (M) Sdn. Bhd.	X	X	-	-	-	-	-
7	CCM Chemicals Sdn. Bhd.	X	X	-	-	-	-	-
8	Keylargo (M) Sdn. Bhd.	X	X	-	-	-	-	-
9	Daichem Enterprise (M) Sdn. Bhd.	X	X	-	-	-	-	-
10	Nagasc (M) Sdn. Bhd.	-	X	-	-	-	-	-
11	E.P.O Corporation sdn. Bhd.	-	-	-	-	-	-	-
12	ST Chemicals Sdn. Bhd.	-	X	-	-	-	-	-
13	Jemco Sdn. Bhd.	-	-	-	-	-	-	-
14	Tesway (M) Sdn. Bhd.	-	X	-	-	-	-	-
15	Perusahaan Kimia Gemilang Sdn. Bhd.	X	X	-	-	-	X	-
16	Sing Swee Bee Sdn. Bhd.	X	X	-	-	-	-	-
17	Globechem Sdn. Bhd.	-	X	-	-	-	-	-
18	Kimia Pertama (M) Sdn. Bhd.	-	-	-	-	-	X	-
19	Aurora Chemicals Sdn. Bhd.	X	X	-	-	-	-	-