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COMITÉ EXÉCUTIF
DU FONDS MULTILATÉRAL AUX FINS
D'APPLICATION DU PROTOCOLE DE MONTRÉAL
Quarante-cinquième réunion
Montréal, 4 – 8 avril 2005

PROPOSITION DE PROJET: THAÏLANDE

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

Élimination

- Plan national d'élimination du CFC : Plan annuel de mise en œuvre Banque mondiale pour 2005

DESCRIPTION DU PROJET

Historique

1. À sa 35e réunion, le Comité exécutif a approuvé le Plan national thaïlandais d'élimination des CFC et est convenu, en principe, d'allouer à ce pays une enveloppe totale de 14 728 626 $US devant être décaissée entre 2001 et 2009 en vue d'éliminer sa consommation restante évaluée à 3 066 tonnes PAO de CFC du Groupe I de l'Annexe A, 34 tonnes PAO de 1,1,1-TCA et 7,52 tonnes PAO de tétrachlorure de carbone (TCC). Depuis lors, les tranches de 2001, 2002, 2003 et 2004, totalisant 11 061 626 $US, ont été versées à la Banque mondiale. Les programmes d'élimination ont permis chaque année de réduire la consommation de SAO à des niveaux inférieurs aux objectifs fixés dans l'accord.

2. Comme prévu dans cet accord, la Banque mondiale soumet à la 45e réunion la demande de décaissement de la tranche de 2005, qui s'élève à 1 330 400 $US plus les coûts d'appui connexes de 111 736 $US. Cette soumission comprend un rapport préliminaire sur la mise en œuvre du programme de travail pour 2004 ainsi qu'un programme de travail proposé pour 2005. Conformément à l'accord, qui stipule que le décaissement de 2005 « ne sera effectué qu'après vérification satisfaisante par la Banque mondiale que la Thaïlande a atteint son objectif de consommation pour 2003 », la Banque mondiale joint aux présentes l'audit de vérification concernant les importations de CFC, 1,1,1 trichloroéthane et TCC de la Thaïlande en 2003. Le programme de travail annuel pour 2005 et les audits de vérification des importations pour 2003 sont joints en annexe.

3. Le tableau ci-dessous résume les principales données du programme de travail annuel pour 2005 élaboré dans le cadre du plan national d'élimination pour la Thaïlande.

Pays	Thaïlande
Titre du projet:	Projet d'élimination des SAO Plan national d'élimination des CFC
Année du plan	2005
Nombre d'années écoulées	3
Nombre d'années restantes	5
Consommation maximale de SAO pour 2004 (en tonnes PAO), Plan annuel pour 2004	2 291 tonnes PAO de substances du Groupe I de l'Annexe A (CFC) 34 tonnes PAO de TCA 7,52 tonnes PAO de TCC Total : 2 332,52 tonnes PAO
Consommation maximale de SAO pour 2005 (en tonnes PAO), Plan annuel pour 2005	1 364 tonnes PAO de substances du Groupe I de l'Annexe A (CFC) 4,5 tonnes PAO de TCA 1,13 tonne PAO de TCC Total : 1 369,63 tonnes PAO
Financement total approuvé en principe au titre du plan d'élimination des CFC	14 728 626 $
Financement total décaissé en date d'octobre 2004	11 061 626 $
Montant du financement sollicité au titre du Plan annuel pour 2005	1 330 400 $

Rapport préliminaire sur le programme de travail annuel pour 2004

4. La vérification des importations de CFC en 2003 a indiqué que la consommation réelle de SAO en Thaïlande se répartissait comme suit : 1 846,14 tonnes PAO de CFC, 2,39 tonnes PAO de 1,1,1-TCA et zéro tonne de TCC. Ces consommations étaient toutes inférieures aux objectifs pour 2003 définis dans l'accord à savoir : 2 777 tonnes PAO de CFC, 34 tonnes PAO de 1,1,1-TCA et 7,52 tonnes PAO de TCC. Les résultats préliminaires du programme de travail pour 2004 ont également indiqué une consommation inférieure aux objectifs : 1 358,32 tonnes PAO de CFC, zéro tonne de 1,1,1-TCA et zéro tonne de TCC, comparées aux objectifs de 2 291 tonnes PAO de CFC, 34 tonnes PAO de 1,1,1-TCA et 7,52 tonnes PAO de TCC. La Banque mondiale entend réaliser la vérification des résultats de 2004 en vue de leur soumission en 2006.

5. Ces résultats ont en partie été atteints grâce aux stricts contrôles mis en place par le gouvernement sur les importations de CFC et au prélèvement de taxes sur ces substances importées. Le gouvernement a réduit les quotas d'importation plus rapidement que prévu dans le plan national d'élimination. D'autre part, afin de réduire la dépendance vis-à-vis des CFC, le ministère des Finances a instauré une taxe sur les importations de CFC qui s'est traduite par l'augmentation des prix de ces substances réglementées, encourageant ainsi de nombreuses industries à adopter une solution de remplacement plus tôt que prévu.

6. Le programme de travail pour 2004 a atteint les deux principaux objectifs fixés pour cette année. D'une part, le gouvernement a approuvé l'amendement du décret ministériel portant sur les lois sur les transports et les véhicules (B.E. 2522) prévoyant l'inspection des frigorigènes des climatiseurs d'automobile dans le cadre de l'inspection annuelle des véhicules, qui sera appliqué par la Direction des transports terrestres en 2005. D'autre part, le gouvernement a approuvé en décembre 2004 le cadre juridique proposé par le ministère de l'Industrie visant à interdire l'utilisation de CFC et de TCA dans les secteurs manufacturiers à partir de janvier 2005. Ces deux mesures auront une forte influence sur la mise en œuvre du plan national d'élimination au-delà de 2005. Par ailleurs, le plan a poursuivi ses efforts pour contacter et financer les industries qui continuent d'utiliser des SAO dans les secteurs des aérosols, des solvants et des mousses.

7. Le programme a mis en œuvre un certain nombre d'activités d'assistance technique, visant notamment : le plein fonctionnement de l'unité de gestion du projet; une campagne de sensibilisation du public sur le plan national d'élimination; l'interdiction de l'utilisation des CFC, TCC et 1,1,1-TCA dans les secteurs manufacturiers en 2005; et la préparation d'un programme de formation des formateurs destiné aux agents des douanes et aux techniciens en climatisation d'automobiles. Parmi les problèmes rencontrés, l'augmentation des volumes de frigorigène à base de CFC contaminé par des hydrocarbures et du HCFC-22 semble s'être répandue et représente une part importante de l'assistance technique fournie en 2004 et 2005. Pour éviter ce problème, l'importation de compresseurs utilisant du CFC-12 devrait être interdite. L'élaboration de la stratégie transitionnelle concernant les inhalateurs à doseur a été légèrement retardée en raison du tsunami mais se poursuit de manière satisfaisante.

8. À la fin 2004, sur les 11 061 626 $US reçus du Fonds multilatéral, 8 253 622 $US, soit environ 75 %, avaient été engagés. Le programme a par ailleurs déclaré avoir réaffecté une partie des économies réalisées à des activités d'investissement en vue de l'achat d'identificateurs de frigorigène afin d'aborder le problème des mélanges.

Programme de travail pour 2005

9. Le programme de travail pour 2005 propose des réductions de la consommation supérieures à celles fixées dans l'accord :

	Accord	Programme de travail pour 2005	Consommation réelle en 2004
CFC	1 364 tonnes PAO	1 222,49 tonnes PAO	1 358,32 tonnes PAO
1,1,1-TCA	4,5 tonnes PAO	0	0
TCC	1,13 tonne PAO	0	0

La réduction de la consommation réelle enregistrée en 2004 (inférieure à l'objectif fixé dans l'accord) s'élève à 135,83 tonnes PAO, soit 134,28 tonnes PAO dans le secteur manufacturier et 1,55 tonne PAO dans le secteur de l'entretien.

10. S'il est vrai que de nombreuses activités menées en 2004 se poursuivront en 2005, le programme annuel pour 2005 se concentrera néanmoins sur trois activités : l'application de l'amendement prévoyant l'inspection des frigorigènes des climatiseurs d'automobiles lors de l'inspection annuelle des véhicules; l'application de l'interdiction des CFC et du 1,1,1 trichloroéthane dans le secteur manufacturier en 2005; et la gestion du problème croissant lié aux frigorigènes contaminés. Ces tâches sont énormes, notamment l'application des deux mesures législatives approuvées par le gouvernement.

11. Le programme de travail pour 2005 est important car ses résultats seront utilisés pour définir la probabilité que la Thaïlande réduise de 50 % sa consommation de CFC et de 85 % sa consommation de TCC par rapport aux niveaux de référence définis par le Protocole de Montréal.

12. La Banque mondiale prévoit des dépenses totales d'environ 9,6 millions $US en 2005 sur les 12,6 millions $US reçus du Fonds multilatéral.

Audit des importations de SAO

13. L'audit des importations de CFC, 1,1,1-TCA et TCC pour l'année 2003 a été réalisé par un expert-comptable thaïlandais. Il comprenait un examen de la procédure de contrôle des importations/exportations mise en œuvre par le gouvernement ainsi que la validation des importations réelles par rapport aux quotas délivrés par comparaison des documents en possession des différentes directions concernées.

14. L'importation et l'exportation des SAO sont conjointement contrôlées par la Direction des installations industrielles et la Direction des douanes. La première est chargée de la délivrance des quotas d'importation en fonction des consommations annuelles maximales fixées dans le plan national d'élimination tandis que la seconde est chargée de la gestion des formalités aux frontières concernant les importations et exportations de SAO. L'auditeur a examiné et vérifié par sondage les quotas délivrés aux importateurs en comparant les quantités maximales autorisées dans le plan national d'élimination aux quantités admissibles indiquées dans les permis d'importation. Il a ensuite vérifié la cohérence des pièces justificatives fournies par les

importateurs et exportateurs à la Direction des douanes en vue du dédouanement des SAO. Ces pièces couvraient les importations/exportations approuvées par la Direction des installations industrielles et comprenaient des copies des permis d'importation/exportation, des factures et des documents d'expédition. Enfin, l'auditeur a examiné la liste des principaux clients à partir de la déclaration fournie à la Direction des installations industrielles pour veiller à ce que les industries ayant reçu une assistance du Fonds multilatéral et fourni des rapports à l'issue de leur programme de conversion n'importent plus de SAO.

15. L'auditeur a relevé un certain nombre d'anomalies qu'il a attribuées à des erreurs de codification des substances chimiques importées, notamment dans le cas des données de la Direction des douanes. Le rapport d'audit a conclu que les procédures utilisées pour contrôler les importations de SAO étaient satisfaisantes et que les importations de SAO s'élevaient en 2003 à 476,4 tonnes PAO de CFC-11, 1 369,7 tonnes PAO de CFC-12 et 2,39 tonnes PAO de 1,1,1-TCA. Les importations de TCC, CFC-113, CFC-114 et CFC-115 étaient nulles en 2003. Aucune exportation de ces SAO n'a par ailleurs été enregistrée en Thaïlande en 2003.

OBSERVATIONS ET RECOMMANDATIONS DU SECRÉTARIAT

OBSERVATIONS

16. Le rapport périodique sur le programme de travail pour 2004 et le programme de travail pour 2005 ont été établis conformément aux Lignes directrices pour la préparation, la mise en œuvre et la gestion des plans sectoriels et nationaux d'élimination des SAO sur la base de leur performance (UNEP/OzL.Pro/ExCom/38/57) approuvées par la 38^{e} réunion.

17. Le gouvernement thaïlandais et la Banque mondiale ont fait des efforts méritoires en 2004 pour instaurer de nouvelles mesures législatives visant à faciliter la mise en œuvre du plan national d'élimination.

18. Les objectifs pour 2005 étaient compatibles avec ceux de l'accord et le plan d'action, qui comprenait la poursuite d'activités existantes ainsi que de nouvelles initiatives, était crédible et devrait garantir leur réalisation. Les mesures de réglementation provisoires des CFC et du TCC devant être mises en œuvre en 2005, il est important que les activités prévues soient appliquées avec plus de vigilance.

19. Le gouvernement thaïlandais a mis en place un système de contrôle des quotas d'importation de SAO sous la responsabilité conjointe de plusieurs directions. Les importations de 2003 ont été vérifiées par un auditeur agréé qui a analysé l'efficacité des politiques et procédures de contrôle des importations instaurées par les pouvoirs publics et examiné les documents en possession des directions concernées sur les importations de SAO en 2003. Satisfait des explications fournies au sujet des anomalies observées, l'auditeur a rendu ses conclusions et recommandations.

RECOMMANDATIONS

1. Estimant que les importations de CFC, TCA et TCC de la Thaïlande étaient inférieures en 2003 aux objectifs de consommation fixés dans l'accord, le Secrétariat invite le Comité exécutif à :

a) Prendre note, avec satisfaction, de l'audit de vérification des importations de CFC, TCA et TCC de la Thaïlande au cours de l'année 2003; et

b) Approuver le programme de travail pour 2005 du plan national thaïlandais d'élimination des CFC ainsi que les crédits de 1 330 400 $US et les coûts d'appui connexes de 111 736 $US pour la Banque mondiale sollicités pour ce programme.

THAILAND NATIONAL CFC PHASE-OUT PLAN

2005 ANNUAL PROGRAM

PROJECT MANAGEMENT UNIT
DEPARTMENT OF INDUSTRIAL WORKS (DIW)
MINISTRY OF INDUSTRY
THAILAND

WITH ASSISTANCE FROM

THE WORLD BANK

18 January 2005

Thailand National CFC Phase-out Plan
2005 Annual Implementation Plan
Submitted to the 45th Executive Committee

DATA SHEET

COUNTRY:	**THAILAND**
PROJECT TITLE:	**National CFC Phase-out Plan**
YEAR OF PLAN: **NO. OF YEARS COMPLETED**: **NO. OF YEARS REMAINIG UNDER THE PLAN**:	2005 3 (2002 - 2004) 5 (2005 – 2009)
TARGET ODS CONSUMPTION IN 2004: **(AGREEMENT)**	• 2,291 ODP tons of Annex A, Group I • 34 ODP tons of 1,1,1-TCA • 7.52 ODP tons of CTC.
TARGET ODS CONSUMPTION IN 2005: **(AGREEMENT)**	• 1,364 ODP tons of Annex A, Group I • 4.5 ODP tons of 1,1,1 – TCA • 1.13 ODP tons of CTC.
TOTAL FUNDING APPROVED IN PRINCIPLE:	US$ 14,728,626
TOTAL FUNDING RELEASED AS OF DEC. 2004:	US$ 11,061,626
LEVEL OF FUNDING REQUESTED FOR 2005:	Investment: US$ 1,130,400 PMU cost: US$ 200,000 **Total:** **US$** 1,330,400
NATIONAL IMPLEMENTING AGENCY:	Project Management Unit Department of Industrial Works
LEAD IMPLEMENTING AGENCY:	The World Bank
IA SUPPORT COSTS:	Investment (9%): US$ 101,736 PMU (5%): US$ 10,000 **Total:** **US$ 111,736**
CO-IMPLEMENTING AGENCY:	None

PROJECT SUMMARY

The National CFC Phaseout Plan will phase out the remaining consumption of 3,568 ODP tons of Annex A, Group I chemicals during the period of 2001-2010. To achieve this target, a series of investment, non-investment, technical assistance, and capacity building activities will be carried out. The National CFC Phaseout Plan will enable the Thai Government to ban the use of CFC in the manufacturing sector by 2005 and the use of CFC in the servicing sector by 2010. In addition, the proposed National CFC Phaseout Plan will also phase out 34 ODP tons of 1,1,1-TCA and 7.52 ODP tons of CTC by 2010.

IMPACT OF PROJECT ON COUNTRY'S MONTREAL PROTOCOL OBLIGATIONS The project will enable the Government of Thailand to meet all its Montreal Protocol obligations.

Part I

2004 Annual Program Accomplishments

A. Targets Met

The actual consumption of ODS in Thailand in 2003 was 1,846.14 ODP tons of CFCs and 2.39 ODP tons of 1,1,1-TCA. There were no imports of CTC in 2003. These levels of consumption were well below the maximum allowable consumption values specified by the Agreement between Thailand and the Executive Committee, as summarized in Table 1.

Table 1: Consumption in 2003

All data in ODP Tons	CFCs	1,1,1 TCA	CTC	Total
Maximum allowable consumption in 2003	2,777	34	7.52	2,818.52
Actual imports in 2003[1]	1,846.14	2.39	0	1,848.53

[1] As will be presented in 2003 verification report, which is being submitted to the Executive Committee along with this 2005 AWP

As per the Agreement between Thailand and the Executive Committee, the annual consumption targets for 2004 include a maximum allowable consumption of 2,291 ODP tons of CFCs, 34 ODP tons of 1,1,1-TCA, and 7.52 ODP tons of CTC. These targets represent a reduction of 486 ODP tons of CFC consumption from the previous year's targets, while there is no reduction requirements for TCA and CTC.

In 2004, the actual consumption of CFCs was 1,358.32 ODP tons and zero for 1,1,1-TCA, and CTC. This indicates that Thailand has again surpassed its reduction targets for ODS in 2004. Verification of the 2004 consumption data will be carried out by an independent auditor as part of the 2005 Annual Program. The 2004 verification report will be submitted to the Executive Committee along with the 2006 Annual Program.

A.1 Policy Actions – Key Milestones

Import quotas and excise tax

The significant reduction of CFC consumption achieved in 2003 was partly attributable to proactive policies of the Government that were introduced in 2002. These included a policy from the Department of Industrial Works (DIW) to reduce import quotas in 2003 faster than what was originally planned in the National CFC Phase-out Plan. In addition, the significant reduction achieved in 2003 also resulted from an excise tax on CFCs imposed by the Ministry of Finance. These policy measures had direct effects on the prices of CFC-11 and CFC-12 in the market, and drove a large number of enterprises to convert their production processes to non-CFC alternatives.

Mandatory MAC inspections

Cabinet has approved an amendment of the Ministerial Decree of the Transportation Act B.E. 2522 and of the Vehicle Act B.E. 2522 to include an inspection of refrigerant in MAC systems as part of the annual vehicle inspection to be enforced by the Department of Land

Transport (DLT). The Ministry of Transportation has confirmed the amendment of the Transportation Act B.E. 2522 and of the Vehicle Act B.E. 2522 to The Office of the Council of State. This activity was the first key milestone of the National CFC Phaseout Plan for 2004.

Ban of ODS in the manufacturing sector
In December 2004, Cabinet approved the legal framework proposed by the Ministry of Industry to ban the use of CFCs and 1,1,1-TCA in the manufacturing sector starting from January 2005. The draft Ministry of Industry Notification has been sent to the Office of the Council of State for final review prior to signatory and publication in the Royal Gazette. This activity was the second key project milestone for 2004.

Reduction of CFC smuggling
Close coordination between DIW and the Customs Department on the Customs Training Program has contributed to the increasing efforts of costumes officers to control imports of CFCs, in particular CFC-12. In 2004, there were nine cases of illegal smuggling of CFC-12 into Thailand. The total amount of CFC-12 involved in these incidents was 8.337 ODP tons.

A.2 Public Awareness activities
Given the stringent policy to control imports of CFCs by DIW and the Customs Department, and given the policy by the Ministry of Finance to impose an excise tax on CFCs, prices of major CFCs (CFC-11 and CFC-12) in Thailand have consecutively increased from previous years. The Project Management Unit (PMU) has undertaken a number of public awareness activities to inform the industry about the Government's policy to ban the use of CFCs in the manufacturing sector from 2005 onwards.

PMU has also launched additional advertisements on major newspapers and radio targeted to the aerosol, foam and solvent sectors (CFC-113 and CTC) to identify remaining CFCs consuming enterprises in relevant sectors before closure of the sector.

As reported in previous Annual Programs, it has become common to find CFC-12 contaminated with other chemicals, mainly HCFC-22 and hydrocarbons, in the market. Therefore, a series of public awareness campaigns focusing on the impacts of using CFC-12 contaminated with other chemicals and on the impacts of using improper refrigerants in MAC systems have been launched. These awareness activities have been conducted through: 1) various media campaigns in radio, newspapers, television etc.; and 2) during workshops for certification of MAC service technicians jointly organized by DIW and the Department of Skill Development (DSD).

B. <u>Industry Action</u>

In coordination with the National Ozone Unit (NOU), other approved projects outside the National CFCs Phaseout Plan were physically completed in 2004. Completions of these on-going sub-projects have contributed to achievement of the targets stipulated in the Agreement of the National CFCs Phaseout Plan.

B.1 Aerosol sector

Three potential beneficiary companies had been identified in the aerosol sector. The PMU contacted two of the enterprises and started assessing their potential conversion to hydrocarbons. These companies had recently replaced their CFC-based technologies with hydrocarbon-based equipment, and therefore assistance was to be limited to improving the companies' safety equipment in order to meet national safety standards. However, due to difficulties in securing supporting documentation, the companies have confirmed their decision not to seek financial assistance from the National CFC Phaseout Plan.

The third company initially identified in the aerosol sector manufactures hi-temperature gold and aluminum automotive paint, automotive undercoat, penetrating oil, and crazy string. The PMU has appointed an international consultant appointed to assist the company in the preparation of a project proposal. Alternative technology selected by the PMU for the sub-project is hydrocarbon with DME. In addition to procurement of equipment, the sub-project also included development of new formulation and safety aspects. The sub-grant agreement for this project has been signed. Procurement of equipment is in progress and acknowledgement of equipment selection was sent to the financial intermediary. Installation of equipment is expected in July 2005. Sub-project is expected to be completed by February 2006.

B.2 Solvent sector

CFC-113

In 2004, no additional CFC-113 consuming companies expressed interest in seeking financial support for conversion to non-CFC processes. Of the six CFC-113 consuming companies initially identified by the National CFCs Phaseout Plan, four confirmed their decision not to seek funding from DIW to support cost of conversion. All of these four companies have already converted to non-CFC processes. One company could not be contacted by DIW. Therefore, only one company confirmed its decision to seek financial support from DIW and the MLF. The company has converted to use alkaline cleaning solutions in its cleaning process and therefore funding to the company will be made on a retroactive financing basis. The sub-grant agreement has been signed and the baseline equipment has already been disposed. A Project Completion Report (PCR) has been prepared and will be submitted to PMU by the end of first quarter of 2005.

1,1,1-TCA

Three enterprises were identified in the National CFC Phase-out Plan as potential beneficiaries of 1,1,1-TCA conversion projects. Funding to a shoe sole manufacturer that converted its cleaning process to 1,1,2-TCE has been completed and the PMU endorsed the project's PCR in December 2, 2004. The second enterprise, a MAC component manufacturer, converted its cleaning process to hydrocarbon washing technology and will receive retroactive financing for its conversion. The Appraisal Report for this project has been endorsed by PMU on December 14, 2004 and signature of the sub-grant agreement is expected in this first quarter 2005. Disbursement to these two companies will be made by the second quarter of 2005. PMU assisted the final company to identify alternative technologies. The enterprise will convert to dry-ice blasting techniques for cleaning of generator motors and to using 1,1,2-TCE for cleaning its small electric components. The sub-grant agreement with this company has also been signed.

CTC
Only one enterprise in the solvent sector was identified as potential beneficiary of a CTC-conversion project. The PMU has confirmed that a project will be carried out with a company in the pharmaceutical industry. Two companies that had previously been identified as potential beneficiaries confirmed their decision not to seek financial support from DIW.

B.3 Foam sector
A foam working group including representatives of all polyol suppliers and DIW has determined implementation modalities for this sector. Given most of the companies identified are small and medium-size enterprises, financial assistance will be implemented through two modalities, as individual sub-project and as group sub-projects. Funding criteria and criteria for classifying the type of sub-project for each company have been established and agreed among the working group. The total consumption of CFC in foam sector in 2004 was 114.28 ODP tons.

Individual sub-projects
Based on discussions with polyol suppliers, there were 29 foam companies classified as having potential to implement sub-projects on an individual sub-project basis. As of December 2004, sub-grant agreements with 5 companies have been signed. Implementation of two sub-projects is physically completed, as their baseline equipment was disposed in November 2004 and CFC has been phased out. Implementation of the other three sub-projects is expected to be physically completed by the first quarter of 2005.

In addition, four individual sub-projects are currently being appraised and signings of sub-grant agreements with these companies are expected by January 2005. Six new project proposals are being reviewed by PMU for approval. With regard to the other identified sub-projects, the companies are currently in the process of seeking supporting documentation and preparing project proposals, which will be submitted to PMU by the first quarter of 2005. Delays in submission of project proposals were caused by companies that had difficulties in seeking supporting documentation to verify their eligibility and level of funding. In addition, the companies had to spend time to secure counterpart funding prior to submission of project proposals to PMU. However, this delay is not expected to affect Thailand's CFC phaseout schedule.

Group sub-project
There were initially 28 small foam companies identified as potential beneficiaries under the group sub-project. PMU developed a group project proposal that includes acquisition of foam mixing equipment and safety equipment as well as technology transfer & training and foam trial from polyol suppliers. Procurement of conversion assistance package will be undertaken through voucher scheme. This group sub-project proposal is currently being appraised and is expected to be completed by the third quarter of 2005.

C. <u>Technical Assistance</u>

C.1 Project Implementation and Monitoring Unit (PMU)
Like those undertaken in 2003, the PMU carried out activities under three major components in 2004: (i) public awareness; (ii) investment activities; and (iii) policy related activities. Detailed activities for each component are described below:

Public awareness

PMU in close cooperation with the Department of Skill Development (DSD) organized a press conference in July 2004. The objective of this press conference was to announce the launch of a series of workshops throughout Thailand, for the certification of MAC service technician, which would be undertaken by DSD. PMU coordinated with the Department of Land Transport (DLT) to launch a "MAC Inspection Campaign" in Bangkok, in the Northeast region (Khonkean), and in the Southern region (Suratthani) of Thailand during May-July 2004. An additional campaign was launched during November-December 2004. A number of pamphlets describing the impact of using CFC-12 contaminated with other chemicals, mainly HCFC-22 and hydrocarbon, and describing the impact of using improper refrigerant in MAC systems were also distributed to participants. In addition, PMU in coordination with the Thailand Textile Institute (THTI), organized a press conference in early December 2004 to disseminate the Government's policy regarding the phaseout of 1,1,1-TCA in the textile and garment industry, and the availability of financial assistance to the TCA-consuming factories.

A series of official announcements informing the public of the phase-out dates of CFC consumption and of available financial assistance were disseminated through printed media and through radio, and television (TV documentary). These included an introduction of the Government's plan to introduce a mandatory MAC inspection in 2005, the Government's plan to ban the use of CFCs and 1,1,1-TCA in 2005, and financial assistance for the manufacturing sector.

In relation to the MAC servicing sector, the largest ODS-consuming sector in Thailand, two major components were disseminated in 2004 through various types of media, which included newspapers, magazines, PMU web-site, bus and public vehicle (tuk-tuk) advertisements, radio spots, and a television documentary. The first component was the announcement of a series of certification of MAC service technician program and the provision of MAC service equipment and recovery and recycling machine. The objective of this outreach program was to invite MAC service shops to come forward and participate in the certification of MAC service technicians program. The targeted audience was mainly MAC service shops. A VCD documentary describing the Government's policy to phaseout CFCs in this sector was also developed and disseminated to training centers of the Department of Skill Development (DSD) and to the general public. A number of banners were handed-out to MAC service shops whose technician passed the certification program, in order to attract car owners to have their MAC system serviced at these shops. In addition, a number of brochures inviting MAC service shops to come forward for a certification of MAC service technician workshop and a number of newsletters containing useful information for MAC service shops were sent to each certified MAC service shop.

The second component of the awareness campaign to MAC shops was awareness on the impact of using CFC-12 contaminated with other chemicals (mainly HCFC-22 and hydrocarbon), and the impact of using improper refrigerant in MAC systems. The refrigerant contamination problems have become widespread in Thailand for the last two years. The objective of this outreach is to increase awareness of MAC service shops and owners of vehicles on the proper use of refrigerant in MAC system. The targeted audience is mainly end-users in the MAC service sector. Given that the source of contaminated refrigerant is still unclear (from outside or inside the country), the PMU will address this concern to the Customs Department and other related agencies.

Investment activities

With regards to investment-related activities, the PMU provided technical assistance to foam, aerosol and solvent enterprises to prepare project proposals aimed at seeking financial assistance from DIW. PMU also assisted enterprises that required information on specific alternative technologies, and to identify national and international experts who could provide the necessary technology transfer for a successful conversion. Costs of national and international experts were paid for from the PMU budget. In addition, PMU was also responsible for verification of supporting documentation provided by beneficiary enterprises and for undertaking site visits prior to approval of project proposals submitted by the companies. An update of the progress of implementation of each sub-sector of the NCFCP is described in the "Industry Action" section, above.

Policy activities

On policy-related activities, the PMU played a vital role in facilitating enforcement of regulation of: 1) mandatory MAC inspections; and 2) ban on the use of CFCs and 1,1,1-TCA in the manufacturing sector from 2005 onwards. In relation to the MAC inspection, the Cabinet has approved an amendment of the Ministerial Decree of the Transportation Act B.E. 2522 and of the Vehicle Act B.E. 2522 to include inspection of refrigerant in MAC system as a part of the annual inspection to be enforced by the Department of Land Transport (DLT). The Ministry of Transportation has confirmed amendment of the Transportation Act B.E. 2522 and of the Vehicle Act B.E. 2522 to the Office of the Council of State.

With regards to the regulation to ban the use of CFCs and 1,1,1-TCA in the manufacturing sector, DIW has set up a Working Group comprising of representatives from the Hazardous Substances Control Bureau, Factory Control and Inspection Bureau, Legal Division, Ministry of Commerce and PMU responsible of to setting up regulation to ban the use of CFCs and 1,1,1-TCA. In December 2004, Cabinet approved the legal framework proposed by the Ministry of Industry (through DIW's working group) to ban the use of CFCs and 1,1,1-TCA in the manufacturing sector starting from January 2005. The draft Notification from the Ministry of Industry (MOI) has been sent to the Office of the Council of State for final review prior to MOI's signature and publication in the Royal Gazette.

In addition, in order to prevent the installation of CFC-12 compressors in MAC systems and other refrigeration systems, the PMU also coordinated with the Industrial Waste Management Bureau of DIW to seek control on imports of used CFC-12 compressors. It was confirmed that a condition to prohibit imports of used CFC compressors could be regulated given that used compressors are classified as hazardous substances under Hazardous Substances Act B.E. 2535. A condition to prohibit imports of used CFCs compressors has been included in DIW's order, which was issued in the last quarter of 2004.

C.2 MDI

The development of the MDI strategy started on January 5, 2004. The expected activity completion date was postponed from February 2005 to July 2005 due to unpredicted circumstances that occurred during the second and third tasks. The second task, which commenced in May 2004, consisted of clinical testing with humans to evaluate physical, clinical, and psychological effects from switching from CFC-MDI to non CFC-MDI or DPI, and required approval of six testing centers by the Ethical Committee. Delays in these approvals meant that the second task will end in November 2004. The third task period

commenced in December 2004 and unpredicted involvement of medical professionals in activities involving the Tsunami disaster will caused delays. The third task will be completed by May 2005 and a final report will be received by July 2005.

In December 2004, the Food and Drug Administration (FDA) set up a meeting to allow the consultants that are developing the MDI strategy to present the outcome of the first and second tasks (including clinical testing), and to present the proposed National CFC-MDI phase-out strategic plan. The meeting was headed by the Secretary General of FDA and comprised of doctors, patients, MDI and DPI pharmaceutical import companies, FDA officers, officers from other departments of Ministry of Public Health. The result from this meeting was to set up an Ad Hoc working group comprising of these stakeholders that will work on: 1) specific details of the proposed strategic plan; 2) a reduction schedule; and 3) a draft outline of the timeframe for phasing out CFC-MDI in Thailand.

C.3 Textile and Garment Industry

The Thailand Textile Institute (THTI) submitted an appraisal report to the PMU for the phaseout of 1,1,1 TCA from the garment industry that was reviewed and approved by November 29, 2004. The Thai Military Bank (TMB), previously known as IFCT, has been assigned as financial intermediary to this project. The project includes technical assistance and investment components totaling US$1,026,066, with an expected duration of twenty months. The contract between THTI and TMB was signed on December 3, 2004. Implementation of the project started immediately.

C.4 Mandatory Requirement for MAC Inspection

In response to the 2004 Annual Program, procurement and delivery of the first ten refrigerant identifiers (RI) were completed in April 2004. These ten RI were from various brand names and had different features. The Department of Land Transport (DLT) used these RI for trial proposes throughout the MAC Inspection Campaign conducted during May-July 2004.

DLT requested about 200 RI for the implementation of MAC inspection program. However, given that RI will be a fundamental instrument of annual inspections, DLT collected more information regarding the efficiency, convenience and in particular the durability of the various instruments. As of December 2004, all information was available and the final RI specifications were finalized by DIW and DLT. Procurement of RI for inspection stations owned by DLT will be undertaken immediately in 2005. Given the above, training of inspection technicians, which was originally planed in 2004, has been postponed to 2005.

With regards to the development of the MAC inspection manual, DIW have already signed a contract with the consultant. A draft MAC inspection manual was submitted to PMU in December 2004. The final MAC inspection manual will be completed by January 2005.

C.5 Train-the-Trainer Program and Certification of MAC Service Technicians

In response to the previous Annual Program, two train-the-trainer workshops for trainers of training institutes and centers of the Department of Skill Development (DSD) were organized in January and February 2004. The content covered by these workshops includes, among others: 1) the Government's policy for phaseout CFCs in MAC service sector; 2) working

safety issues; 3) good practices for servicing passenger cars and buses; and 4) procedures for retrofitting CFC-12 MAC to HFC-134a systems.

After train-the-trainer workshops were conducted, DSD in collaboration with PMU organized 36 workshops for certification of MAC service technicians, throughout the country, during February-July 2004. There were 1,800 technicians from 1,200 MAC service shops certified during this series of workshops. A follow-up workshop was organized in August to evaluate achievements, to identify difficulties encountered and to develop solutions to address problems.

In September 2004, PMU and DSD established the second phrase of certification of MAC service technician workshops, which was carried out during the last quarter of 2004. There will be 32 workshops for certification of MAC service technician throughout the country during November 2004-March 2005. It is expected that the number of certified technicians and MAC service shops will be the same as that from earlier workshops, or 1,800. As of December 2004, 15 of the 32 workshops for certification of MAC service technician have been already organized.

As indicated in the previous Annual Program, if necessary, the PMU would use the flexibility provided in the Agreement to reallocate savings from the manufacturing sector to the service sector. Savings from the manufacturing sector have been reallocated to the service sector to cover the cost of organizing these workshops for certification of MAC service technicians. Funding for organizing 36 and 32 certification of MAC service technician workshops in 2004 and 2005 has been committed. The transfer of savings to service sector in 2004 amounted to US$72,343. Additional allocation from manufacturing sector to service sector is also expected in 2005 to cover the cost of launching additional certification of MAC service technician workshops, which will be held at the last quarter of 2005. The actual transfer of these savings will be reported to the Executive Committee in the 2006 Annual Program.

With regards to procurement of equipment for training institutes and centers, DSD confirmed that it needs 62 sets of MAC service equipment and 29 recovery/ recycling/recharge machines. Savings were used for funding of 31 units of RI to its training institutes and centers. 62 sets of MAC service equipment and 29 recovery/recycling/recharge machines have been procured, and equipment delivery to training institutes and centers is expected by June 2005. However, RI could not be procured in 2004, as Cabinet approval of import duty exemption for imported equipment, which took place in in January 2004, did not include RI for DSD. Procurement of RI for DSD will be carried out in 2005, after PMU submits an additional proposal to the Cabinet for import duty exemption.

In order to enable certified MAC service shops to receive financial assistance for MAC service equipment and recovery & recycling machines, the PMU developed a group sub-project proposal for the MAC service sector. The group sub-project proposal contains information on eligibility criteria for financial assistance, the voucher scheme, project implementation arrangements, and project monitoring. As of December 2004, approximately 600 vouchers were handed-out to certified MAC service shops. Vouchers for the rest of certified MAC service shops will continue to be distributed in 2005.

With regards to the Group Coordinator (GC) who will be assigned to facilitate provision of equipment through the voucher scheme, the PMU made efforts to identify the most effective approach to deal with thousands of beneficiaries, located across the country. It was finally

decided that there would be three consulting firms appointed as GC. Each of the GC will be responsible for a different region in Thailand. In cooperation with the financial intermediary, PMU has carried out the selection process of the GC. To date, selection of the GC has been completed. Contract signing between the GC and the financial intermediary is expected by January 2005.

As the original provisions included in the National CFC Phase-out Plan did not include funding of service fees for GCs, the PMU also used the flexibility provided in the Agreement to reallocate savings from the manufacturing sector to the service sector in order to cover service fees of the GCs. In line with the group sub-project proposal, transfer of savings to the service sector for GC fee in 2004 was US$300,000.

C.6 Customs Training

The development of a Customs Training Manual was completed in early 2004. About 500 copies of Customs training manual were published for train-the-trainer workshops, jointly organized by PMU and the Customs Department, and for expansion workshops organized by the Customs Department.

60 units of RI have been procured and delivered to the Customs Department. Two 3-day train-the-trainer workshops were organized in October 2004, with assistance of the regional network coordinator of Southeast Asia and Pacific (ROAP) and international consultants from the Philippines. A total of approximately 60 officials from the Customs Department and the Excise Department participated in these workshops. The Customs Department has already included training on inspection of ODS into its training curriculum.

Given that additional series of Customs officers training sessions will be conducted in 2005, the Customs Department requested PMU to publish additional 800 copies of Customs training manuals. Publication of additional manuals will be initiated immediately in 2005.

A press conference between DIW and the Customs Department on their corporation will be organized in January 2005. DIW will officially hand over RI to the Customs Department during this press conference. Certificates for 60 officials, who passed the train-the-trainer program, will be handed-out during this event.

The status of the technical assistance activities is summarized in Table 2, below.

Table 2. Summary of Technical Assistance Activities Carried Out in CY04

No.	Proposed Activity	Objective	Target Group	Impact	Status
	Project Management Unit				
1	Public Awareness Activities	To provide Government with necessary support to carry out all activities proposed under the NCFCP	DIW	Strengthen capacity of Government to carry out the NCFCP to ensure timely and effective preparation and execution of the project activities	PMU conducted a number of activities to disseminate information on the NCFCP. Main activities included press conferences with DSD, a MAC Inspection Campaign with DLT, and a press conference with THTI. Information related to the Government's plan to introduce a mandatory MAC inspection in 2005, the Government's plan to ban the use of CFCs and 1,1,1-TCA in 2005, contamination refrigerant and use of improper refrigerant with MAC system, and financial assistance for the manufacturing and the MAC service sector was also disseminated through printed media, radio, television, magazines, brochures, bus and tuk-tuk advertisement, and newsletters. Pamphlets describing contaminated refrigerants and use of improper refrigerant with MAC systems were also distributed to MAC service shops and car owners. In addition, PMU also updated PMU website and participated in the 2004 International Ozone Day Celebration.
2	Investment Activities				PMU provided technical assistance to foam, aerosol and solvent enterprises to prepare project proposals to seek financial assistance from DIW. PMU also assisted enterprises that needed information on specific alternative technologies to identify national and international experts who could provide technology transfer needed for successful conversion. A number of project proposals were submitted to financial intermediaries (Thai Military Bank and Government Savings Bank) for appraisal and signing of sub-grant agreement. Implementation of these investment activities is on going.

No.	Proposed Activity	Objective	Target Group	Impact	Status
3	Coordinate with Other Agencies Responsible for Policy Activities				The Ministry of Transportation has confirmed amendment of the Transportation Act B.E. 2522 and of the Vehicle Act B.E. 2522 to The Office of the Council of State after approval from the Cabinet. The Cabinet has approved the legal framework proposed by the Ministry of Industry to ban the use of CFCs and 1,1,1-TCA in the manufacturing sector. A condition to prohibit import of used CFCs compressor has been included in DIW's order.
	Technical Assistance for MDI Sector				
1	Formulation of Strategic Plan, including consultation and information dissemination	To increase awareness on CFC MDI transition plan	Pharmaceutical Association, Doctors, MDI Importers, and Patients	To promote the use of non-CFC MDI	Activities under the first (data collection) and the second task (strategy planning) were completed. The consultant presented outcome of the first task and second task to key stakeholders. An Ad Hoc working group will be established to work on details of the proposed strategic plan, to develop a reduction schedule and to draft outline timeframe of for the phaseout of CFC-MDI in Thailand.
	Textile and Garment Industry				
1	Technical Assistance to THTI	To develop local exposure limits and proper ventilation systems, to carry out information	1,000 - 1,400 Garment and Textile factories	Reduction of 1,1,1-TCA in Textile and Garment Industry	THTI's proposal has been accepted. The project includes technical assistance and investment components and its expected duration is twenty-months. The contract between THTI and TMB was signed on December 3, 2004. The project started implementation immediately.

No.	Proposed Activity	Objective	Target Group	Impact	Status
2	Installation of Safety Equipment	dissemination and to facilitate the conversion			Activities could not be carried out as planned due to delays with approval of THTI's proposal. Therefore, in 2005 THTI will proceed with the development of local safety standard, with undertaking a nation-wide survey to identify beneficiaries, and with the design of safety equipment for beneficiaries in 2005.
	Mandatory Requirement for MAC Inspection				
1	Establishment of Regulation	To prevent HFC MAC system from being reverse-retrofitted to CFC-12	DLT's vehicle inspection stations and private vehicle inspection stations	Reduction of CFC-12 consumption in MAC service sector and increase awareness of vehicle's owners	The Cabinet has approved an amendment of the Transportation Act and the Vehicle Act to include inspection of refrigerant in MAC system as a part of the annual inspection to be enforced by DLT. The Ministry of Transportation has confirmed amendment of these two Acts to the Office of the Council of State.
2	Development of Inspection Manual and Procurement of Refrigerant Identifiers				Draft MAC inspection manual was submitted to PMU in December 2004. Final MAC inspection manual will be completed by January 2005. The first 10 refrigerant identifiers have been delivered to DLT. DLT used these refrigerant identifiers for trial proposes during 2004. Procurement of refrigerant identifiers could not be procured due to the need to collect more information on efficiency, convenience and, in particular, durability of instruments. Information was available and final specification was finalized by DIW and DLT. Procurement of refrigerant identifiers for inspection stations owned by DLT will be undertaken immediately in 2005.
3	Training of DLT and Vehicle Inspection Station staff				Training of inspection technicians, which was originally planed in 2004 could not be conducted due to delays in acquiring refrigerant identifiers. However, the activities will be conducted in 2005.
	Train-the-Trainer Program and Certification of MAC Service Technicians				

No.	Proposed Activity	Objective	Target Group	Impact	Status
1	Train-the-Trainer Program	Increase technical capacity of the MAC service shops	Authorized Training centers and MAC service shops	Reduction of CFC-12 consumption in MAC servicing from repairing MAC system properly	Two train-the-trainer workshops for trainers of training institutes and centers of DSD were organized in January and February 2004. 62 sets of MAC service equipment and 29 recovery/recycling/recharge machines have been procured and deliveries of equipment to training institutes and centers are expected by June 2005. Procurement of refrigerant identifiers to DSD will be carried out in 2005.
2	Certification of MAC Service Technicians				DSD in collaboration with PMU organized 36 workshops for certification of MAC service technician during February-July 2004 (1,800 technicians from 1,200 MAC service shops certified). A follow-up workshop was organized in August to evaluate achievements, to identify difficulties encountered, and to develop solutions to address problems. PMU and DSD established the second phase of certification of MAC service technician workshops. 32 workshops will be held during November 2004 to March 2005, 15 of which have been already organized from November to December 2004. Approximately 600 vouchers were handed-out to certified MAC service shops. Selection of the Group Coordinator was also completed.
	Customs Training Program				
1	Development of Customs Training Manual and Training Course	Build technical capacity of custom officials to	Customs Officials	Strengthen effectiveness of import control	Development of Customs Training Manual was completed in early 2004. Training course was developed and agreed between the Customs Department and DIW. 60 units of refrigerant identifiers have been procured and delivered.

No.	Proposed Activity	Objective	Target Group	Impact	Status
2	Train-the-Trainer Program	inspect the import chemicals		system of CFC	Two 3-day train-the-trainer workshops were organized in October 2004. A total of approximately 60 officials from the Customs Department and the Excise Department participated in these workshops. The Customs Department has already included training on inspection of ODS into its training curriculum.

D. Summary of Government Actions Taken

DIW issued import quotas for CFC-11 and CFC-12 to importers of these chemicals. The amount of quota for CFC-11 and CFC-12 issued in 2004 was within the amount stipulated in by DIW for the period of 2002 – 2010. There were no import licenses granted to importers for CFC-113, CFC-114, and CFC-115, 1,1,1-TCA and CTC in 2004 . The Factory Control and Inspection Bureaus of DIW were informed of DIW's policy to prohibit the use of CFCs and 1,1,1-TCA in the manufacturing sector from 2005 onwards. Chemical importers were informed of this policy as well.

The Cabinet has approved an amendment of the Ministerial Decree of the Transportation Act B.E. 2522 and of the Vehicle Act B.E. 2522 to include inspection of refrigerant in MAC systems as a part of the annual inspection to be enforced by the Department of Land Transport (DLT). The Ministry of Transportation has confirmed amendment of the Transportation Act B.E. 2522 and of the Vehicle Act B.E. 2522 to The Office of the Council of State.

The Cabinet has approved the legal framework proposed by the Ministry of Industry to ban the use of CFCs and 1,1,1-TCA in the manufacturing sector starting from January 2005. The draft Ministry of Industry Notification has been sent to the Office of the Council of State for final review prior to signature and publication in the Royal Gazette.

The PMU had discussions with the Industrial Waste Management Bureau of DIW to prohibit imports of used CFCs compressor. A condition to prohibit imports of used CFCs compressors has been included in DIW's order, which was issued in the last quarter of 2004.

The Food and Drug Administration (FDA) made a decision to set up an Ad Hoc working group to work on the details of the strategic plan for the phase out CFC-MDI in Thailand, on the reduction schedule and on a draft outline for its timeframe.. The working group would be set up in early 2005 and comprise of doctors, patients, MDI and DPI pharmaceutical import companies, FDA officers, officers from other departments of Ministry of Public Health, and DIW.

DIW developed a verification protocol for verifying the amount of CFCs and other chemicals covered by the National CFC Phase-out Plan Agreement. The verification protocol was designed on a basis of the established national accounting practice. The verification report for 2003 import of CFCs, 1,1,1-TCA and CTC was submitted to the Executive Committee at its 45th Meeting. The report confirmed that Thailand met all targets for 2003.

DIW has developed a database of MAC service shops certified under the MAC service technician certification program. Information in this database comprises of names of MAC service shops, addresses, and contact information. Modifications of the database of certified MAC service shops will be carried out in 2005 to facilitate access of the general public.

Key activities for the Government actions in 2004 are summarized in Table 3, below:

Table 3- Key Government actions in 2004

NO.	POLICY/ACTIVITY PLANNED	EXPECTED SCHEDULE OF IMPLEMENTATION	STATUS
1.	Control import quota for CY2004.	January-December 2004	Total quota for CFC-11 and CFC-12 issued to importers and preliminary information indicates that the total amount of CFCs, 1,1,1-TCA and CTC was within the respective targets stipulated in the Agreement.
2.	Verification of CFCs, 1,1,1-TCA, and CTC consumption for CY 2003	March-September 2004	Completed and will be submitted as a part of this Annual Program.
3.	Announcement of ban on the use of CFCs and 1,1,1-TCA in manufacturing sector[1]	January-December 2004	Announcement of ban was re-made to importers in 2004 and brochures describing the government policy to ban the use of CFCs and 1,1,1-TCA in manufacturing sector from 2005 were distributed to related industries. The announcement was also published in the PMU web site and disseminated through radio. The Factory Control and Inspection Bureau stopped issuance of new licenses to manufacturers that plan to use CFCs, 1,1,1-TCA or CTC in their production.
4.	Announcement of MAC Inspection Program[1]	January-December 2004	Announcement was disseminated during MAC Inspection Campaign through brochures, which were distributed to owners of cars. The announcement was also published in the PMU web site and disseminated through radio and television. MAC service shops were informed of this policy during certification workshops.
6.	Database of trained technicians in the MAC sector[2]	August-December 2004	Database was prepared, but modification is needed.

[1] 2004 Performance Target

[2] 2005 Performance Target

NO.	POLICY/ACTIVITY PLANNED	EXPECTED SCHEDULE OF IMPLEMENTATION	STATUS
7.	Public Awareness Activities	January-December 2004	See Part C above
8.	Follow-up and Monitoring completed sub-projects	January-December 2004	Completed
9.	International Ozone Day Ceremony	12 September 2004	Completed

E. 2004 Budget and Financial Performance

Table 4- 2004 Budget

Description	Original Funding Approved ($US)			Revised Budget ($US)		Funding Disbursed ($US)			Obligated Expenditure in CY 2004 ($US)[2]
	Cumulative Funding Approved as of December 2003	Funding Approved in CY 2004	Cumulative Funding Approved as of December 2004	Reallocation of Funding in CY 2004 from / to[1]	Cumulative Available Funding as of December 2004	Cumulative Expenditure Disbursed as of December 2003	Actual Expenditure Disbursed in CY 2004	Cumulative Expenditure Disbursed as of December 2004	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Investment Projects - Aerosols	102,960	0	102,960	0	102,960	0	0	0	48,400
TA for MDIs	57,200	0	57,200	0	57,200	0	12,491	12,491	44,709
Investment Projects - CFC-113	965,120	0	965,120	-159,966	805,154	0	0	0	260,443
Investment Projects - 1,1,1-TCA and CTC	181,000	0	181,000	0	181,000	0	0	0	160,022
TA for contact cleaners[3]	23,100	0	23,100	0	23,100	0	0	0	0
Garment and Textile Industry	866,100	0	866,100	159,966	1,026,066	0	17,870	17,870	1,008,196
Investment Projects - Foam	3,619,846	0	3,619,846	-372,343	3,247,503	0	38,923	38,923	1,772,703
MAC Inspection Requirement	1,237,500	0	1,237,500	0	1,237,500	0	16,258	16,258	1,221,242
Train-the-Trainer - MAC	319,000	0	319,000	0	319,000	0	30,878	30,878	288,122
Certification of MAC Service Technicians Workshops	0	0	0	72,343	72,343	0	35,691	35,691	36,653
Financial Subsidy for Purchasing MAC Servicing Equipment and Group Coordinator Fee	990,000	880,000	1,870,000	300,000	2,170,000	0	0	0	2,170,000

Description	Original Funding Approved ($US)			Revised Budget ($US)		Funding Disbursed ($US)			Obligated Expenditure in CY 2004 ($US)[2]
	Cumulative Funding Approved as of December 2003	Funding Approved in CY 2004	Cumulative Funding Approved as of December 2004	Reallocation of Funding in CY 2004 from / to[1]	Cumulative Available Funding as of December 2004	Cumulative Expenditure Disbursed as of December 2003	Actual Expenditure Disbursed in CY 2004	Cumulative Expenditure Disbursed as of December 2004	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Financial Subsidy for Purchasing MAC R&R Machines	279,400	235,400	514,800	0	514,800	0	0	0	514,800
Project Management Unit	940,000	200,000	1,140,000	0	1,140,000	196,938	347,380	544,317	595,683
Custom Training	165,000		165,000	0	165,000	1,511	30,840	32,352	132,648
TOTAL	9,746,226	1,315,400	11,061,626	0	11,061,626	198,449	530,330	728,779	8,253,622

Remarks: (1) Negative figures shown in column (4) correspond to the amount of funding reallocated to other activity. Positive figures shown in the same column indicate the amount of funding allocated to respective activity

(2) Figures shown in column (9) indicate funding already committed that will be disbursed in the future;

(3) The companies decied not to seek financial support from DIW.

Part II

2005 Annual Program

F. Actual consumption in 2004 and target consumption in 2005

Table 5- Actual consumption in 2004 and target consumption in 2005 (in ODP Tons)

Indicators		Chemicals	Preceding Year[1] (2004)	Year of Plan[2] (2005)	Reduction
Supply of ODS	Maximum allowable ODS imports	CFCs	2,291	1,364	927
		TCA	34	4.5	29.5
		CTC	7.52	1.13	6.39
	Import	CFCs	1,358.32	1,222.49	135.83
		TCA	0	0	0
		CTC	0	0	0
	Production	--	--	--	--
	Total (1)	**CFCs**	**1,358.32**	**1,222.49**	**135.83**
		TCA	**0**	**0**	**0**
		CTC	**0**	**0**	**0**
Demand of ODS	Manufacturing	CFCs	134.28	0	134.28
		TCA	0	0	0
		CTC	0	0	0
	Servicing	CFCs	1,224.04	1,222.49	1.55
	Stockpiles	--	---	---	---
	Total (2)	**CFCs**	**1,358.32**	**1,222.49**	**135.83**
		TCA	**0**	**0**	**0**
		CTC	**0**	**0**	**0**

[1] Actual amount of reported chemicals imported to Thailand in 2004.

[2] Target amount of reported chemicals in 2005.

G. Industry Action

PMU will continue its outreach program to create awareness of the Government's policy to ban the use of CFCs and 1,1,1-TCA in the manufacturing sector and will accelerate implementation of investment sub-projects in the aerosol, solvent and foam sectors. The annual program for 2005 will continue to build on the progress made up to 2004.

The issue related to contamination of CFC-12 with hydrocarbon and HCFC-22 has become widespread in the past two years. In the past year, MAC service shops conveyed a number of complains regarding contaminated refrigerant and disputes between MAC service shops and retailers were also reported. The widespread contamination problems raised concerns of the Thai Government. DIW will assign staff and will coordinate with other government agencies (such as the Ministry of Commerce, the Excise Department, and the Office of the Consumer Protection Board) to monitor refrigerant composition and, if found, to further investigate original sources of contaminated chemicals. This is to help preventing misuse of refrigerant or the use of contaminated refrigerant in MAC and refrigeration system. To undertake this activity, acquisition of refrigerant identifiers for these agencies as well as for the PMU and NOU is required, in order to strengthen their inspection capacity. Therefore, DIW proposes to procure additional refrigerant identifiers for these agencies. Funding for procuring these additional refrigerant identifiers will be obtained from two sources: 1) the PMU will use savings from activities in the Customs Training Program to finance procurement of refrigerant identifiers for the Excise Department; and 2) the PMU will utilize funding savings from the manufacturing sector to procure RI for other agencies. As procurement of RI for other agencies was not originally stipulated in the National CFCs Phaseout Plan, the PMU will use the flexibility provided in the Agreement to reallocate savings from the Customs Training Program and the manufacturing sector to procure additional equipment. The actual transfer of these savings and the number of RI procured will be reported to the Executive Committee in the 2006 Annual Program. It is anticipated that about 16 RI units will be procured. However, the actual number procured might changed, as appropriate.

In addition, the PMU will also use the flexibility provided in the Agreement to reallocate savings from the manufacturing sector to the service sector, in order to cover the costs of launching additional workshops for certification of MAC service technicians, which will be held during the last quarter of 2005. The actual transfer of these savings will be reported to the Executive Committee in the 2006 Annual Program.

A breakdown of ODS consumption in 2004 and 2005 by sector, in both manufacturing and servicing, is presented in Table 6. Table 7 provides a breakdown of consumption by ODS:

Table 6 - Breakdown of actual consumption of ODS in 2004 and target consumption in 2005 in various sectors

Sector	Actual Consumption Preceding Year (ODP Tons) 2004[1] (1)	Target Consumption Year of Plan (ODP Tons) 2005 (2)	Reduction Within Year of Plan (1)-(2)	Number of Projects Completed	Number of Servicing Related Activities	ODS Phase-out (in ODP tons)
Manufacturing						
Aerosol	0	0	0	0		0
Foam	114.28	0	114.28	N/A		114.28
Refrigeration	20	0	20	1		20
Solvents	0	0	0	1		0
Other	0	0	0	0		0
Total	**134.28**	**0**	**134.28**	**1**		**134.28**
Servicing						
Refrigeration	1,224.04	1,222.49	1.55	0	7	1.55
Total	**1,224.04**	**1,222.49**	**1.55**	**0**	**7**	**1.55**
GRAND TOTAL	**1,358.32**	**1,222.49**	**135.83**	**1**	**7[2]**	**135.83**

[1] The ODS consumption figure shown for each sub-sector in the year 2004 is lower than the target for that year due to early phase-out of CFC caused by: 1) on-going sub-projects; and 2) aggressive actions taken by the Government including excise tax on CFCs imposed by the Ministry of Finance based on the recommendation of DIW, which led a large number of enterprises to early conversion to non-CFC alternatives.

[2] Seven ongoing activities include: (i) Chiller Replacement/Retirement, (ii) Retirement of CFC-12 Domestic Refrigerators, (iii) Retirement of CFC-12 commercial refrigerators, (iv) Retirement of CFC-12 Refrigerator Containers, (v) Retirement of CFC-12 cold stores, (vi) Train-the-Trainer Program and Certification of MAC Service Technicians, and (vii) Financial Subsidy for R&R Machines.

Table 7 - Breakdown of actual consumption of CFCs, 1,1,1-TCA, and CTC in 2004 and target consumption of CFCs, 1,1,1-TCA, and CTC in 2005

Sector	Actual Consumption Preceding Year (ODP Tons) 2004				Target Consumption Year of Plan (ODP Tons) 2005			
	CFCs	1,1,1-TCA	CTC	Total	CFCs	1,1,1-TCA	CTC	Total
Manufacturing								
Aerosol	-	-	-	-	-	-	-	-
Foam	114.28	-	-	**114.28**	-	-	-	-
Refrigeration	20	-	-	**20**	-	-	-	-
Solvents	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Servicing								
Refrigeration	1,224.04	-	-	**1,224.04**	1,222.49	-	-	**1,222.49**
GRAND TOTAL	**1,358.32**	**0**	**0**	**1,358.32**	**1,222.49**	**0**	**0**	**1,222.49**

H. Technical Assistance

H.1 Project Implementation and Monitoring (PMU)

The PMU will appoint an independent auditor to perform the required verification of import of CFCs, 1,1,1-TCA, and CTC for CY2004. The verification report of chemicals covered by the National CFCs Phaseout Plan for CY 2004 will be completed by the third quarter of 2005, and it will be submitted to the Executive Committee along with the 2006 Annual Program.

PMU plans to procure additional RI for itself, other offices within DIW and other Government agencies such as the Ministry of Commerce, the Excise Department, and the Office of Consumer Protection Board. Acquisition of refrigerant identifiers for these agencies is considered necessary, as it would strengthen their capacity to identify the composition of refrigerants and, if found, to investigate original source of contaminated refrigerant. This would help preventing misuse of refrigerant or the use of contaminated refrigerant in MAC and refrigeration systems.

In 2005, the PMU will modify the database of certified MAC service shops and will post the modified database in the PMU's website. This is to make it easier for the general public to seek information on certified MAC service shops where they should have their MAC systems serviced.

With regards to the public awareness component, PMU plans to launch a number of activities in 2005. Key activities comprise the followings:

- Update website of PMU: Update progress of project implementation, the Government's policy to phaseout the use of CFCs, 1,1,1-TCA and CTC, the MDI phaseout strategy, the phaseout of 1,1,1-TCA in the textile and garment industries, information on potential hazard of blending refrigerants, importance of using proper refrigerant, and MAC inspection requirement. This includes modification of database of certified MAC service shops;

- MAC Program Advertisement: Given that contamination of hydrocarbon and HCFC-22 in CFC-12 refrigerant is becoming widespread, PMU will disseminate information with regards to impacts of using improper refrigerants in MAC systems. The announcement also includes invitation to car owners to have their MAC systems serviced by certified MAC service shops. MAC inspection requirement will also be disseminated. In addition, PMU in close cooperation with DSD will reach out to service technicians to get them to enroll in the Certification program. MAC program advertisement will be released through various type of media such as newspaper, radio, television, pamphlet, magazine, and newsletter;

- Bus and Public Vehicle (Tuk-tuk) Advertisement: Advertisement through this method has proven to be very effective. In 2005, the PMU will continue undertaking public awareness activities through this method;

- MAC Inspection Campaign: PMU, in cooperation with the Department of Land Transport (DLT), will organize a MAC Inspection Campaign in April 2005 and at the end of CY 2005. Information with regards to MAC inspection requirements and contamination effects will be disseminate to participants;

- Banners: Banners will be distributed to certified MAC service shops. The objective of this banner is to attract car owners to get their MAC service from these shops;

- Stickers: Stickers containing information on refrigerant types, names of service shops, and date last serviced will be distributed to certified MAC service shops. The sticker will be attached to MAC systems by the service shops;

- Press Conference: DIW and the Customs Department will jointly organize a press conference in January 2005 to make an announcement regarding inspection of ozone depleting substances imported into Thailand. In addition, DIW in corporation with the Department of Land Transport (DLT), will also organize a press conference to officially announce MAC inspection as a part of annual vehicle inspection and enforcement of regulation. DIW and the Department of Skill Development (DSD) will also organize a second press release at the end of CY 2005, the objective of which is to announce progress and success of program implementation to the public.

On policy related activities, the PMU will work closely with the Department of Land Transport (DLT) to have MAC inspection in operation (in line with amendment of the Ministerial Decree of the Transportation Act B.E. 2522 and of the Vehicle Act B.E. 2522). In addition, PMU will work closely with the Office of the Council of State and the Factory Control and Inspection Bureaus on the Ministry of Industry Notification, to ban the use of CFCs and 1,1,1-TCA in the manufacturing sector starting from 2005.

H. 2 MDI

The third task of CFC-MDI phase-out strategic assignment is to disseminate the outcome of the first and second tasks to medical professionals, and patients through symposium, conferences, and group meetings. This dissemination will be to general public through different media. Duration of the third task is from December 2004 to May 2005. This

dissemination will stimulate public awareness for National CFC-MDI phase-out plan from FDA, and will encourage actions from FDA related to this phaseout.

H. 3 Textile and Garment Industry

THTI is responsible of undertaking the phaseout of 1,1,1 TCA from the garment industry with monthly monitoring meetings with TMB and the PMU. In response to the contract between THTI and TMB, which was signed on December 3, 2004, THTI will work closely with relevant government agencies to develop an exposure limit for 1,1,2 trichloroethylene. THTI will, at the same time: 1) develop prototype of ventilation systems; 2) conduct a survey of beneficiaries; 3) disseminate information to the public and to the garment industry; and 4) coordinate and monitor distribution of ventilation systems. According to the National CFC Phase-out Plan, fund allotment for technical assistance and investment components for textile and garment industry was initially 866,100 $US. However, the change of exchange rate between Thai Baht and $US at the time of preparing the National Plan and present situation, and the increasing cost of equipment and man-power make resulted in an increase of project costs of US$159,966. This increment could be covered by reallocation of savings from the manufacturing sector. Reallocation of these funds is possible due to the fact that some of the companies identified in the National CFCs Phaseout Plan turned down funding assistance from DIW.

Presently, THTI has established a database of target factories including 1,717 factories, it has started designing a ventilation prototype, and has begun a field survey of 1,400 factories.

H.4 Mandatory Requirement for MAC Inspection

PMU will finalize MAC inspection manual, which will be used by technicians of inspection stations. The final MAC inspection manual will be published and distributed to inspection stations through the Department of Land Transport (DLT).

With regards to procurement of the coverage of RI to inspection stations owned by the Department of Land Transport (DLT), PMU will work with DLT to undertake procurement in accordance with the national bidding process. Training of inspection technicians will be carried out immediately after commissioning of RI.

The rest of RI will be distributed to private vehicle inspection stations. Procurement of RI for private inspection stations will be carried out through a voucher scheme. PMU will proceed with this activity soon after receiving list of qualified private inspection stations from DLT, which is expected by February 2004.

In the mean time, the PMU will work closely with the Department of Land Transport (DLT) to have MAC inspection in operation (in line with amendment of the Ministerial Decree of the Transportation Act B.E. 2522 and of the Vehicle Act B.E. 2522).

H.5 Train-the-Trainer Program and Certification of MAC Service Technicians

The PMU and the Department of Skill Development (DSD) will continue organizing 17 workshops for certification of MAC service technicians during January-March 2005. The second follow-up workshop with training institutes and centers of DSD will take place in April 2005. Date and venue for the next training phase will also be discussed during the follow-up workshop. It is expected that the next phase of certification of MAC service technician will start during the last quarter of 2005.

62 sets of MAC service equipment and 29 recovery/ recycling/recharge machines will be delivered to training institutes and centers of DSD by June 2005. PMU will submit additional proposal to grant import duty exemption from the Cabinet, in order to allow procurement of 31 RI by the first quarter of 2005. Procurement of RI to DSD will be carried out immediately after PMU grants an approval from the Cabinet for import duty exemption.

PMU will work closely with the financial intermediary to issue voucher to the rest of the certified MAC service shops. In addition, contracts between the selected Group Coordinators (GC) and the financial intermediary will be signed by January 2005. With contract signing, the GCs can start implementation of their assignment immediately.

H.6 Customs Training

The Customs Training Center of the Customs Department has set a date for the first Customs training in February 2005. This customs training will take place as a series of workshops throughout 2005, in order to train respective Customs officers working in major ports/entry points across the country. Refrigerant Identifiers will be given to Customs stations in major ports/entry points across the country.

As required by the Customs Department, PMU will publish additional 800 copies of Customs training manual for Customs officer training, which will be conducted throughout 2005.

The Customs Department has investigated the possibility to use other Government laboratories for testing suspected gases. One of the government laboratories that possess capability to perform this testing is the laboratory of Department of Science Service, at the Ministry of Science and Technology. Hence, the Customs Department may not require calibrating testing equipment in the customs testing center. However, in some case, there might be a need to confirm results inspected by refrigerant identifiers for legal issues or to dispute settlement, transport canister is necessary to collect sampling of suspected substances from large containers at major ports/entry points across the country to the laboratories. The Customs Department may require transport canisters to collect samples of the suspected substances to the laboratory from major ports/entry points across the country. If need be, PMU will use flexibility provided in the Agreement to reallocate funding approved for calibration of testing equipment to purchase these canisters in the first quarter of 2005.

In addition, as indicated above, the PMU plans to procure RI to the Excise Department using saving from activities of the Customs Training Program. As procurement of RI to the Excise Department is not originally stipulated in the National CFCs Phaseout Plan, PMU will use flexibility provided in the Agreement to reallocate savings from this program to procure refrigerant identifiers to the Excise Department.

Table 8 - Summary of technical assistance activities to be carried out in CY2005

No.	Proposed Activity	Objective	Target Group	Impact	Status
	Project Management Unit				
1	PMU Operations	To provide Government with necessary support to carry out all activities proposed under this plan	DIW	Strengthen capacity of Government to carry out the NCFCP to ensure timely and effective preparation and execution of the project activities	PMU operations will continue.
2	Public Awareness Activities				Public awareness activities in 2005 will be carried out throughout the year. Activities include update of PMU website and MAC database. Public awareness on the Government policy to ban the use of CFCs and 1,1,1-TCA in the manufacturing sector and to include inspection of refrigerant in MAC system, certification workshops, and contaminated refrigerant will be carried out through various type of media such as newspaper, radio, television, pamphlet, magazine, and newsletter, bus and public vehicle (Tuk-tuk) advertisement. Press conference among key government agencies will also organized.
3	Implementation of Investment Activities				PMU will accelerate implementation of investment sub-projects in aerosol, solvent and foam sectors. The annual program for 2005 of the PMU will continue to build on the progress made through 2004.
4	Coordinate with other agencies related to policy and regulations				PMU will work closely with the Department of Land Transport (DLT) to have MAC inspection in operation and will also coordinate with the Factory Control and Inspection Bureaus in order to enforce the regulation to ban the use of CFCs and 1,1,1,-TCA in manufacturing sector. In addition, DIW will assign other offices within DIW and will coordinate with other government agencies for their corporation to identify composition of refrigerant and, if found, to investigate original source of contaminated refrigerant. Refrigerant identifiers will be procured and distributed to these government agencies.

No.	Proposed Activity	Objective	Target Group	Impact	Status
	Technical Assistance for MDI Sector				
1	Dissemination of Finding from Data Collection and MDI Phaseout Strategy	To increase awareness on CFC MDI transition plan	Pharmaceutical Association, Doctors, MDI Importers, and Patients	To promote the use of non-CFC MDI	Finding and draft strategy plan will be disseminated to general public through different media such as pamphlet, symposium, conferences, and group meetings. An Ad Hoc working group will work on details of the proposed strategic plan, reduction schedule and draft outline timeframe of phasing out CFC-MDI in Thailand.
	Textile and Garment Industry				
1	Implementation of Technical assistance and Investment Activities	To develop local exposure limits and proper ventilation system, and carry out information dissemination	11,00 - 1,400 Garment and Textile factories	Reduction of 1,1,1-TCA in Textile and Garment Industry	THTI will work closely with relevant government agencies to develop an exposure limit for 1,1,2-trichloroethylene, develop prototype of ventilation system, survey of beneficiaries, dissemination of information to public and garment industry, and will also coordinate and monitor distribution of ventilation systems subsequently.
	Mandatory Requirement for MAC Inspection				
1	Development of Inspection Manual and Procurement of Refrigerant Identifiers	To prevent HFC MAC system from being reverse-retrofitted to CFC-12	DLT's vehicle inspection stations and private vehicle inspection stations	Reduction of CFC-12 consumption in MAC service sector and increase	Final MAC inspection manual will be finalized by January 2005 and will be published and distributed to inspection stations through the Department of Land Transport (DLT). PMU will also work with DLT to undertake procurement of 200 units of refrigerant identifiers for the inspection stations owned by DLT. Procurement of refrigerant identifiers to private inspection stations would be carried out through voucher scheme.

No.	Proposed Activity	Objective	Target Group	Impact	Status
2	Training of DLT and Vehicle Inspection Station staffs			awareness of vehicle's owners	Training of inspection technicians will be carried out immediately after commissioning of refrigerant identifiers.
	Train-the-Trainer Program and Certification of MAC Service Technicians				
1	Train-the-Trainer Program	Increase technical capacity of the MAC service shops	Authorized Training centers and MAC service shops	Reduction of CFC-12 consumption in MAC service from repairing MAC system properly	62 sets of MAC service equipment and 29 recovery/ recycling/recharge machines will be delivered to training institutes and centers of DSD by mid of June 2005. PMU will start procuring 31 RI by the first quarter of 2005.
2	Certification of MAC Service Technicians				PMU and DSD will continue organizing 17 workshops for certification of MAC service technician during January-March 2005. The second follow-up workshop with training institutes and centers of DSD will take place in April 2005. Certification of MAC service technician workshops in next phase will be started at the last quarter of 2005. PMU will also work closely with the financial intermediary to issue voucher to the rest of certified MAC service shops. Contract between the selected Group Coordinators (GC) and the financial intermediary will be signed by January 2005. With contract signing, the GCs will start implementation of their assignment immediately.
	Customs Training Program				

No.	Proposed Activity	Objective	Target Group	Impact	Status
1	Train-the-Trainer Program	Build technical capacity of custom officials to inspect the import chemicals	Customs Officials	Strengthen effectiveness of import control system of CFC	A press conference will be organized in January 2005. Certificates will be handed out to trainers that pass the train-the-trainer program. In addition, 60 RI will be handed out to the Customs Department. The Customs Department may require transport canisters to collect sampling the suspected gases to the laboratory from major ports/entry points across the country. If need be, procurement will be carried out in the first quarter of 2005.
2	Training Curriculum.				The Customs Training Center of the Customs Department has set date for the first customs training in February 2005. This customs training will be in series throughout 2005 by Customs Training Center in order to train respective customs officers working in major ports/entry points across the country.

I. Planned Government Actions

PMU will work closely with the Department of Land Transport (DLT) to have MAC inspection in operation (in line with amendment of the Ministerial Decree of the Transportation Act B.E. 2522 and of the Vehicle Act B.E. 2522).

DIW will work closely with the Office of the Council of State to put the Ministry of Industry Notification to ban the use of CFCs and 1,1,1-TCA in the manufacturing sector in the Royal Gazette. PMU will also coordinate with the Factory Control and Inspection Bureaus in order to enforce this regulation.

DIW will assign other offices within DIW and will coordinate with other Government agencies (such as the Ministry of Commerce, the Excise Department, and the Office of the Consumer Protection Board) to identify composition of refrigerant and, if found, to investigate original source of contaminated refrigerant. This is to help preventing misuse of refrigerant or the use of contaminated refrigerant in MAC and refrigeration system. RI will be procured and distributed to these government agencies.

PMU will appoint an independent auditor to perform the required verification of import of CFCs, 1,1,1-TCA, and CTC for CY2004, which will be submitted along with the 2006 Annual Program.

Key activities for the Government actions to be executed in 2005 are summarized in Table 9, below.

Table 9 – Key Government actions in 2005

NO.	POLICY/ACTIVITY PLANNED	EXPECTED SCHEDULE OF IMPLEMENTATION	STATUS
1.	Control import quota for CY2005	January-December 2005	Quota for CFC-11 and CFC-12 was issued in December 2004 and total amount is within the respective target stipulated in the Agreement.
2.	Verification of CFCs, 1,1,1-TCA, and CTC consumption for CY 2004	April-September 2005	Appointment of auditor will be completed by the first quarter of 2005
3.	Announcement of ban on the use of CFCs, and 1,1,1-TCA in manufacturing sector[1]	January-December 2005	Announcement of Ministry of Industry Notification will be published in the Royal Gazette and will also be disseminated through PMU website, radio, and newspaper.
4.	Announcement of MAC Inspection Program[1]	January-December 2005	Announcement will be made through public awareness campaign jointly carried out

[1] 2004 Performance target

NO.	POLICY/ACTIVITY PLANNED	EXPECTED SCHEDULE OF IMPLEMENTATION	STATUS
			by DIW and DLT.
6.	Database of trained technicians in the MAC sector[2]	January-December 2005	Will be modified from database in 2004 for simply access and will be included in PMU website
7.	Annual MAC inspection requirement is operational[2]	January-December 2005	DIW and DLT are working closely to have MAC inspection in operation.
8.	Public Awareness Activities	January-December 2005	See Part H above
9.	Follow-up and Monitoring completed sub-projects	January-December 2005	-
10.	International Ozone Day Ceremony	September 2005	-

[2] 2005 Performance Target

J. 2005 Budget and Planned Disbursement

Table 10 – Budget and planned disbursement in 2005

Description	Original Funding Approved ($US)			Revised Budget ($US)		Funding Disbursed ($US)		
	Cumulative Available Funding as of December 2004 (1)	Funding Approved in CY 2005 (2)	Cumulative Available Funding in CY 2005 (3)	Proposed Reallocation of Funding in CY 2005 from / to[1] (4)	Cumulative Available Funding in CY 2005 (5)	Cumulative Expenditure Disbursed as of December 2004 (6)	Planned Disbursement[2]	
							To be Disbursed in CY 2005 (7)	To be Disbursed in CY 2006 (8)
Investment Projects - Aerosols	102,960	0	102,960	0	102,960	0	48,400	0
TA for MDIs	57,200	0	57,200	0	57,200	12,491	44,709	0
Investment Projects - CFC-113	805,154	0	805,154	0	805,154	0	260,443	0
Investment Projects - 1,1,1-TCA and CTC	181,000	0	181,000	0	181,000	0	160,022	0
TA for contact cleaners	23,100	0	23,100	0	23,100	0	0	0
Garment and Textile Industry	1,026,066	0	1,026,066	0	1,026,066	17,870	750,000	258,196
Investment Projects - Foam	3,247,503	0	3,247,503	-88,197	3,159,306	38,923	1,200,000	572,703
MAC Inspection Requirement	1,237,500	0	1,237,500	0	1,237,500	16,258	1,221,242	0
Train-the-Trainer - MAC	319,000	0	319,000	0	319,000	30,878	288,122	0
Certification of MAC Service Technicians Workshops	72,343	0	72,343	58,724	131,067	35,691	95,376	0
Financial Subsidy for Purchasing MAC Servicing Equipment and Group Coordinator Fee	2,170,000	770,000	2,940,000	0	2,940,000	0	1,980,000	960,000
Financial Subsidy for Purchasing MAC R&R Machines	514,800	180,400	695,200	0	695,200	0	514,800	180,400
Project Management Unit	1,140,000	200,000	1,340,000	0	1,340,000	544,317	560,267	235,416
Custom Training	165,000	0	165,000	0	165,000	32,352	132,648	0

Description	Original Funding Approved ($US)			Revised Budget ($US)		Funding Disbursed ($US)		
	Cumulative Available Funding as of December 2004	Funding Approved in CY 2005	Cumulative Available Funding in CY 2005	Proposed Reallocation of Funding in CY 2005 from / to[1]	Cumulative Available Funding in CY 2005	Cumulative Expenditure Disbursed as of December 2004	Planned Disbursement[2]	
							To be Disbursed in CY 2005	To be Disbursed in CY 2006
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Train-the-Trainer - Refrigeration	0	180,000	180,000	0	180,000	0	0	180,000
Procurement of Refrigerant Identifiers to Other Government Agencies	0	0	0	29,474	29,474	0	29,474	0
TOTAL	11,061,626	1,330,400	12,392,026	0	12,392,026	728,779	7,285,503	2,386,716

Remarks: (1) Negative figures shown in column (4) indicate the amount of funding reallocated to other activities. Positive figures shown in the same column represent the amount of funding allocated to respective activity;

(2) Planned disbursement shown in column (7) and (8) is based on available funding as of CY2005

AUDITOR'S REPORT

THE VERIFICATION OF THE YEAR 2003'S CFCs, 1,1,1-TRICHLOROETHANE AND CARBON TETRACHLORIDE CONSUMPTION OF THAILAND

PREPARED BY

S&T PARTNERSHIP, BANGKOK, THAILAND

SEPTEMBER 15, 2004

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List of Abbreviations

1,1,1-TCA	=	1,1,1-Trichloroethane
B.E.	=	Buddhist Era
CD	=	Customs Department
CTC	=	Carbon Tetrachloride
DIW	=	Department of Industrial Works
ExCom	=	Executive Committee
Max.	=	Maximum
MLF	=	Multilateral Fund
MOI	=	Ministry of Industry
MOI Not.	=	Notification by the Ministry of Industry
MT	=	Metric Ton
NCFCP	=	National CFC Phaseout Plan
No.	=	Number
ODP MT	=	Ozone Depleting Potential Metric Ton
ODS	=	Ozone Depleting Substances

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The Ozone Depleting Substances (ODS) Phaseout Project of Thailand:
The National CFC Phaseout Plan
Verification of 2003 ODS Consumption

AUDITOR'S REPORT

I have audited procedures of issuing import/export quota against the ODS Import/Export License executed by Department of Industrial Works (DIW), and import/export control executed by DIW and Customs Department (CD). I have audited supporting documents to certify actual consumption of Annex A, Group I chemicals (CFC-11, CFC-12, CFC-113, CFC-114, and CFC-115); 1,1,1-Trichloroethane (1,1,1,-TCA); and Carbon Tetrachloride (CTC) during January 1, 2003 to December 31, 2003. These supporting documents are the responsibility of DIW, CD, and importers/exporters. My responsibility is to express an opinion on the import-export (actual consumption) of the controlled chemicals and the compliance with the condition agreed with the Executive Committee (ExCom) based on my audit.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform the audit to obtain reasonable assurance that the actual consumption (import-export) of the controlled chemicals are within the condition agreed with the ExCom. The audit includes examining, on a test basis, evidence supporting the amounts and types of these controlled chemicals that have been issued against ODS Import/Export License and actually imported or exported for the year 2003. I believe that my audit provides a reasonable basis for my opinion.

In my opinion, the actual permits to importers/exporters were correctly licensed and within the maximum allowable consumption level (for import of CFC-11 and CFC-12), in accordance with the quota specified in the agreement between the Government of Thailand and the ExCom.

And also the actual consumption (import – export) of the controlled chemicals was within the condition agreed with the ExCom as follows:

Imported were 476.435 MT of CFC-11, 1,369.7074 MT of CFC-12, and 23.90 MT of 1,1,1-TCA. CFC-113, CFC-114, CFC-115, and CTC were not imported.

Exported was none of CFC-11, CFC-12, CFC-113, CFC-114,CFC-115, 1,1,1-TCA, and CTC.

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The document process and the data records from DIW have been found to be consistent and correctly recorded with supporting document whilst there were some discrepancies in documents and records from CD. Therefore, reliability of data from DIW is dominant and considers as principal data in import/export verification for the year 2003.

Nattaya P.

Miss Nattaya Parichardsombut
Certified Public Accountant (Thailand)
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S&T Partnership, Bangkok, Thailand.
September 15, 2004

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Chapter I
Introduction

1.1 Background

The Government of Thailand, through Department of Industrial Works (DIW), has received an approval from the Multilateral Fund (MLF) to implement a program for the phased reduction and complete phaseout of consumption of Annex A, Group I, chemicals, 1,1,1-TCA and CTC in the country by applying a combination of regulations, and financial assistance. The program, Thailand National CFC Phaseout Plan (Thailand NCFCP), aims to reduce the negative impacts to the enterprise in light of the world market trend and the regulatory actions. The Government of Thailand, through DIW, wishes to ensure that (i) the public and enterprises are informed and aware of the situation and (ii) the enterprises that are eligible to obtain funding from the MLF, but have not received any assistance from the MLF will have an opportunity to request for technical and/or financial assistance.

The Thailand NCFCP was approved at the 35th Meeting of the Executive Committee (ExCom) in December 2001 and will be implemented through the World Bank. The ExCom has agreed on the principle that it will continue providing funds at the level agreed in the final agreement between the Government of Thailand and the ExCom on an annual basis to support annual programs for this plan. By this approval, Thailand agrees that in exchange for the funding level, it will eliminate its 1,1,1-TCA and CTC consumption by 2010 (Except any consumption that is considered by the Parties as essential uses), and also agrees to reduce its total Group I, Annex A CFC consumption.

From the agreement between the Government of Thailand and the ExCom, it was specified that maximum allowable consumption levels for Annex A, Group I chemicals, 1,1,1-TCA and CTC in 2003 are 2,777 ODP MT, 34 ODP MT, and 7.52 ODP MT respectively.

To enable the Government of Thailand to have the ExCom released 2005 tranche, the government of Thailand must now demonstrate that actual consumption of the said chemicals is in line with the agreed level specified in the agreement and submit an audit report as a part of the annual work plan.

1.2 Scope of work and audit methodology

The objective of this assignment is to perform an audit and certify that consumption of Annex A, Group I chemicals, 1,1,1-TCA and CTC in 2003 are in line with the maximum agreed level specified in the agreement.

Verification of process for issuing of import quota for the year 2003: Review and verify process of issuing of import quota to the importer carried out by DIW to ensure that

the procedures are in line with the procedures set forth in Ministry of Industry's Notification issued under the Hazardous Substances Act B.E.2535 and decision made by the Hazardous Substances Committee.

Verification of quotas issued to importers: Review and verify quota issued to importers by comparing maximum allowable quantity in the agreement and permitted amount as indicated in the import licenses .

Verification of documentation that importers/exporters submitted to DIW when seeking clearance: Verify consistencies of supporting document importers/exporters submitted to DIW when seeking clearance. Supporting documents for the verification are:

- Import/Export Clearance Forms approved by DIW ;
- A copy of Import/Export License;
- Invoices;
- Bills of Lading.

Verification of the record of Customs Department (CD): By a systematic sampling, we verify consistencies of supporting documents importers/exporters submitted to authorized officers of CD when seeking the clearance of CD. The verification also includes the examination to ensure that supporting documents submitted to DIW for that shipment have the same content as those submitted to CD. Supporting documents for the verification are:

- Printouts of CD on Import/Export of these chemicals;
- Declaration Forms;
- Import/Export Clearance Forms approved by DIW;
- A copy of Import/Export License;
- Invoices;
- Bills of Lading.

Review and summarize methodology used by the government for data collection: Review and summarize the methodology used by the government for data collection regarding list of customers purchasing these chemicals from the importers.

List of major customers from the importers: Verify that the customers indicated in the Distribution Declaration Form provided by DIW are not the end-user of such chemicals that are prohibited by the relevant regulation or the enterprises that have completely carried out the conversion to alternative technologies under the MLF Project.

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Chapter II
Note to procedures for issuing import/export quota

2.1 General

According to the notification by the Ministry of Industry dated 17 February 1995, (cited here as MOI Not.1995), Ozone Depleting Substances (ODS) listed in Annex A, B, and C of the Montreal Protocol are classified as type 3 hazardous substances under Thailand's Hazardous Substances Act and as such the import, export, production and possession of these substances require a permit from Department of Industrial Works (DIW), whereas Annex E chemicals are under responsibility of Department of Agriculture. For chemicals listed under Annex A, B, and C, importers/exporters must register with DIW for acquisition of import/export license.

In addition to import/export license, MOI dated 23 August 1995 required importers to seek importation clearance for each shipment before it arrives in Thailand, while exportation clearance for each shipment is required before it departs from Thailand. Applications for import and export permits are handled and approved by DIW.

The importers are required to furnish import license and approved by DIW to Customs Department (CD) to allow such chemicals entering into Thailand. Authorized officers of CD will make a note on the license when goods are cleared through CD. The license is showed to DIW every time an importer wants to get permission to bring in a new shipment of ODS. In that way DIW can control that no ODS is imported after the importers' allowance amount has been met.

By the end of July of the imported year and January of the following year, the importers are required to submit DIW distribution declaration report. This would enable DIW to inspect list of the customers to whom importers sold ODS.

Import of ODS without a license can result in facing fines and imprisonment. Failure to comply with all conditions attached to import licenses can result in suspension or cancellation of import licenses. Import licenses can be suspended up to one year. If licenses are cancelled, importers will no longer be able to import that particular chemical until a new license is issued by DIW. An application for a new license for those importers, whose previous licenses were revoked, cannot be reproduced within five years after the date of cancellation of the previous licenses.

2.2 Procedures for issuing import/export quota of Annex A Group I chemicals, 1,1,1 – TCA and CTC against the ODS Import/Export License (Executed by DIW)

Procedures for issuing import/export quota of Annex A Group I chemicals,1,1,1-TCA and CTC against the ODS Import/Export License (executed by DIW) for each year will take into account the maximum allowable consumption stipulated in the agreement between the Government of Thailand and the Executive Committee (Excom).

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Year	Max. Allowable Consumption Level for Annex A Group I chemicals (ODP MT)	Max. Allowable Consumption Level for 1,1,1-TCA (ODP MT)	Max. Allowable Consumption Level for CTC (ODP MT)
2003	2,777	34	7.52

2.2.1 ***Specific procedures:*** The decision dated June 16, 2000 by the Hazardous Substances Committee mandates DIW to take into account the following conditions for issuance of import license for CFCs, 1,1,1-TCA and CTC to importers:

For CFC-11 and CFC-12:

- The importer must import such chemicals in the previous year for at least 3 consecutive years and follow the procedures set forth in Ministry of Industry's Notification issued under the Hazardous Substances Act B.E.2535.
- Each importer's quota of the chemicals is allocated with a 10% reduction from that of the previous year, however, the quota for each importer can be flexibly determined and shall be based on the domestic need and shall not exceed the maximum allowable consumption level stipulated with the ExCom agreement, as stated in Article 2.2.

For CFC-113, CFC-114, CFC-115, 1,1,1-TCA and CTC:

- The importer must be the end-user of such chemicals in the manufacturing process before January 1, 1999 or entity authorized by the end-users.
- In case of the authorized entity, there must be the letter notifying justification for the need to use such chemicals as well as phaseout plan of such chemicals. The phaseout plan must clearly specify the required amount and phaseout schedule.
- The allowable amount for such chemical is based on the production capacity, amount of such chemicals used per production unit, phaseout plan, financial and technical feasibility to convert to alternative technologies.

With regard to import of CFC-11 or CFC-12, quota for import of CFC-11 and CFC-12 will be based on conditions above. The importers of CFC-11 or CFC-12 must seek an import license from DIW on an annual basis. Before the end of each year, DIW will convene a meeting between DIW and importers of CFC-11 and CFC-12 to seek a bilateral and definitive agreement on percentage of reduction for the following year. The remaining import quota will be granted to only the importers who make request and accept a condition that they will stop import CFC-11 and CFC-12 within the following 5 consecutive years.

Before the end of the year, DIW will notify importers regarding maximum allowable import amount of CFC-11 and CFC-12 for next year. The importers can subsequently proceed with request for CFC-11 or CFC-12 import license.

For import of CFC-113, CFC-114, CFC-115, 1,1,1-TCA and CTC the issue of import license will be based on case by case basis in accordance with conditions above. Like that of CFC-11 or CFC-12, import license of these chemicals is valid only for one year.

With regard to export of CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, 1,1,1-TCA and CTC the issue of export license will be based on the case by case basis and the exporters are required to provide justification for export to support consideration of DIW.

2.2.2 ***In addition to specific procedures:*** DIW requires importers/exporters of Annex A Group I chemicals, 1,1,1-TCA and CTC to follow the Hazardous Substance Act B.E.2535 for seeking import/export license as follows:

Supporting documents for requesting the license: Importers/exporters of controlled substances must register with DIW for acquisition of import/export license. In order to obtain import/export license, the importers/exporters are required to furnish DIW with the following supporting documents:

- Import/Export Request Form completely filled with information regarding (i) Name of Importers/Exporters,(ii) Contact Address,(iii) Place for Storing Chemical legally occupied by importers/exporters,(iv)Formula and Mixtures, (v) Name of Manufacturer and Place of Manufacturing, (vi) Annual Imported/Exported Quantity;
- A copy of identification card of authorized representatives of importers/ exporters;
- A copy of article of corporation;
- An authorization form;
- A copy of registration license;
- A copy of chemical formula analysis;
- Map of place for storing chemicals and surrounding areas;
- Outline of building for storing chemicals;
- Documents describing packaging/contained that keep chemical;
- Fact sheets of chemical safety;
- Documents describing method for chemical storage;
- Documents describing safety measures

Procedures of DIW in verification of supporting documents: Authorized officers of DIW will carry out verification process to assure that all supporting documents are completely submitted, consistent, and importantly, to ensure that safety measures to storage

that particular chemical are adequately employed. If supporting documents are not completely submitted, authorized officers of DIW will notify importers/exporters and request them to submit additional document to DIW within 3 weeks from date of notification (as indicated in the letter). If not, DIW will return all documents to importers/exporters.

However, in case of any inconsistencies or any queries among these supporting documents, DIW will seek clarifications from importers/exporters. Correction of Import/Export Request Form can be carried out by initialing the importers/exporters' signature at every corrected part.

Inspection of storing place: In a case that the verification of supporting documents is finished, authorized officers of DIW will carry out inspection of storing places for the following purposes:

- A building for storing chemicals meet criteria set forth in Ministerial Decree No.1 (B.E. 2537) issued under Article 10 of the Hazardous Substances Act B.E. 2535.
- A method for storing chemicals meet criteria set forth in Ministerial Decree No.1 (B.E. 2537) issued under Article 11, 12, 13 and 19 of the Hazardous Substances Act B.E. 2535.
- Safety measures of storing places are in accordance with criteria set forth in Ministerial Decree No.1 (B.E. 2537) issued under Article 18 and 19 of the Hazardous Substances Act B.E. 2535.
- Determination of allowable import/export quantity shall be taken into account appropriateness of place and method for storing chemical and in accordance with Notification by the Minister of Industry issued under Article 20(1) of the Hazardous Substances Act B.E. 2535

Issuing of import/export license: In a case that results from inspection are in accordance with set forth criteria and conditions, DIW will proceed with issue of import/export license. Importers/Exporters will obtain original import/export licenses and copies of import/export license, will be kept at the office of DIW.

2.3 Procedures for import/export control through approval of import/export clearance (executed by DIW)

For each shipment, before controlled substances are arrived at or depart from the port, importers/exporters are required to furnish DIW with the following supporting documents in order to obtain import/export clearance:

- Import/Export Clearance Form completely filled with information regarding (i) Names of Chemicals, (ii) Formula and Mixtures, (iii) Trade Names, (iv) Imported/Exported quantity, (v) Packaging, (vi) Places of storing chemicals, (vii) Names of Vessels and Customs' point of entry/departure, and (viii) Estimated Date of Arrival/Departure;

- Original Import/Export Licenses and Quantity Deduction Forms;
- Invoices;
- Bills of Lading.

Importers/Exporters are required to submit 2 sets of the above supporting documents. All the supporting documents must be initiated by authorized representatives of importers/exporters.

After verifications of these supporting documents and it was found that all supporting documents are completely submitted, and reliable, DIW will approve import/export clearance by initialing authorized official's signature in the import/export clearance form. If supporting documents are not completely submitted, authorized officers of DIW will explain a suspension of approval of import/export clearance to importers/exporters and will return all documents to importers/exporters. In this case, importers/exporters are required to re-submit full supporting documents for approving of import/export clearance.

However, in case of any inconsistencies in or any queries regarding these supporting documents, DIW will seek clarifications from the importers/exporters. DIW will not approve import/export clearance unless the importers/exporters have clarified all discrepancies. Correction of supporting documents shall be allowed only for import/export clearance forms. In this case, both importers/exporters and authorized officers of DIW are required to initial at every corrected part.

After the import/export clearance has been approved, DIW will deduct import/export quantity that have been approved from the remaining allowable quantity and specified in quantity deduction form which is attached with an original import/export license. This would enable DIW and CD to assure that no ODS will be imported/exported after the importers/exporters' allowable amount has been met.

When approved, 1 set of supporting documents will be returned to importers/exporters for the clearance with CD. Another one will be kept at the office of DIW.

2.4 Procedures for import/export control through the clearance of CD (executed by CD)

For each shipment, the importers/exporters are required to furnish CD with the original import/export license and approved import/export clearance from DIW to get such chemical entering through or departing from port or check point. In addition, the importers/exporters are required to submit declaration form to the authorized officers of CD.

To have the clearance of CD, importers/exporters are required to furnish CD with the following supporting documents:

- Declaration Forms;
- Import/Export Clearance Forms initiated by authorized officers of DIW;
- Original Import/Export Licenses and Quantity Deduction Forms;

- Invoices;
- Bills of Lading.

Authorized officers of CD will make a note on the supporting documents when goods are cleared through CD. If it was found that all supporting documents are completely submitted, consistent, and reliable, authorized officers of CD will endorse the import/export of the controlled substances. In addition, authorized officers of CD will take a note on quantity deduction form to ensure that no ODS is imported after the importers' allowable amount has been met.

When endorsed, the supporting documents will be kept at the office of CD.

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Chapter III
Audit results

The audit methodology was mentioned in Chapter I (see page1 Article 1.2).

3.1 Verification of process for issuing import/export quota for the year 2003

Audit examinations on the process for issuing ***import quota of CFC-11 and CFC-12*** for the year 2003 were carried out and the followings were note:

i. Department of Industrial Works (DIW) convened a meeting between CFC-11 and CFC-12 importers and DIW for the quota allocated to the importer in the year 2003 at DIW meeting room on December 18, 2002.

ii. It was agreed in the meeting that maximum allowable import quantity for CFC-11 and CFC-12 of 2003 would be 10% reduction from that of 2002.

iii. Maximum allowable import quantity of CFC-11 and CFC-12 for each importer as agreed in the meeting has been submitted to the importers.

iv. Importers of CFC-11 and CFC-12 that obtained import quota in the year 2003 have imported CFC-11 or CFC-12 for the last 3 consecutive years in accordance with the criteria described above.

v. To ensure that neither CFC-11 nor CFC-12 will be imported after the importers/exporters' allowable amount has been met, DIW sent a letter notifying Customs Department (CD) with regard to the CFC import quota issued to all the importers for the year 2003.

vi. Authorized officers of DIW proceeded with issue of import licenses by following procedures for approval of import licenses as mentioned in Chapter II, paragraph 2.2.

An examination on issue of ***import license of 1,1,1-TCA for the year 2003*** noted that there were 2 importers requested for acquisition of 1,1,1-TCA-import license. Authorized officers of DIW proceeded with the issue of import licenses by following procedures for approval of import licenses as mentioned in Chapter II, paragraph 2.2.

There is no import quota and license of CFC-113, CFC-114, CFC-115, and CTC in 2003.

With regard to export activity, no exporter requested for export of CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, 1,1,1-TCA and CTC in the year 2003.

From audit examination, we are satisfied that DIW has properly controlled and adhered to the procedures of issuing import/export quota and licenses.

3.2 Verification of quotas issued to importers/exporters

Import: Verification of quota issued to importers of CFC-11 and CFC-12 were carried out by comparing maximum allowable quantity agreed in the meeting and permitted amount as indicted in the import licenses for all the importers. With regard to 1,1,1-TCA, there is no maximum allowable quantity to the importers, as import of 1,1,1-TCA will be approved on case by case basis.

***Export*:** For the year 2003, no exporter requested exported quota from DIW.

From the examination, the followings were noted:

For Import:

Table 1: Annex A, Group I, Chemicals.

Type of Controlled Substances	Max. Allowable* Consumption Level (ODP MT)	2003 Quota** (ODP MT)	Import Amount** (ODP MT)
CFC-11	2,777	650.91	476.4350
CFC-12		1,595.15	1,369.7074
CFC-113		0	0
CFC-114		0	0
CFC-115		0	0
Total	2,777	2,246.06	1,846.1424

***Table 2: 1,1,1*-TCA**

Type of Controlled Substances	Max. Allowable* Consumption Level (ODP MT)	Requested** Amount (ODP MT)	Import Amount ** (ODP MT)
1,1,1-TCA	34	2.39	2.39

Table 3: CTC

Type of Controlled Substances	Max. Allowable* Consumption Level (ODP MT)	Requested Amount (ODP MT)	Import Amount (ODP MT)
CTC	7.52	0	0

Remarks: * = the agreement between the Government of Thailand and the ExCom

** = In accordance with the quota permitted in the year 2003. More details see Appendix 1.

From tables above, it was noted that actual permits to the importers/exporters were correctly licensed and within the maximum allowable quantity (for import of CFC-11 and CFC-12).

From audit examination, we are satisfied that the quota issued to importers/exporters through import/export license were carried out in accordance with maximum allowable amount and the total permits through import/export licenses does not exceed the maximum allowable consumption level as stipulated in the agreement between the Government of Thailand and the ExCom.

3.3Verification of documentation that importers/exporters submitted to DIW when seeking clearance and verification of the record of CD

Verification of documentation that importers/exporters submitted to DIW when seeking clearance and also the record of CD was carried out by comparing document between DIW and CD. The followings were noted:

3.3.1 Examination of CFC-11 import was carried out by verifying 5 of 23 transactions of Customs Declaration Form.

- Five transactions of documentation (100.00% of verified documentation) are consistent with record of DIW;
  The 5 transactions of documentation are listed by importers as follow (For more details, see Appendix 2)

1. I.C.P. Chemicals Co., Ltd.
2. Berli Jucker Specialty Co., Ltd.
3. Tomen (Thailand) Co., Ltd.
4. Thasco Chemical Co., Ltd.
5. Refrigo Equipment Co., Ltd.

3.3.2 Examination of CFC-12 import was carried out by verifying 20 of 70 transactions of Customs Declaration Form.

- Sixteen transactions of documentation (80.00% of verified documentation) are consistent with record of DIW.
- Four transactions of documentation (20.00% of verified documentation) are not consistent with record of DIW;
  The 20 transactions of documentation are listed by importers as follow: (For more details, see Appendix 2)

1. Numthai Equipment Co., Ltd.
2. Dot Bamboo (Bangkok) Co., Ltd.
3. East Asiatic (Thailand) Public Co., Ltd.
4. Ausinee Co., Ltd.
5. Coolman Corpotation Co., Ltd.

6. Toyokoki Inter Co., Ltd.
7. Industrial Trade Co., Ltd.
8. I.C.P. Chemical Co., Ltd.
9. Thasco Chemical Co., Ltd.
10. Berli Jucker Specialty Co., Ltd.
11. Refrigo Equipment Co., Ltd.

3.3.3 Examination of CFC-113 import was carried out by verifying 1 of 1 transaction of Customs Declaration Form

- One transaction of documentation (100.00% of verified documentation) is not consistent with record of DIW;
  The 1 transaction of documentation is listed by importer as follows: (For more details, see Appendix 2)
  1. Louis T. Leonowens (Thailand) Co., Ltd.

3.3.4 There is no import/export for CFC-114, 115 and Carbon Tetrachloride (CTC) in 2003;

3.3.5 Examination of 1,1,1-TCA import was carried out by verifying 2 of 2 transactions of Customs Declaration Form.

- Two transactions of documentation (100.00% of verified documentation) are consistent with record of DIW;

  The 2 transactions of documentation are listed by importer as follow: (For more details, see Appendix 2)

  1. Webpak Group Co., Ltd.
  2. Daika (Thai) Inc., Ltd.

3.3.6 Examination of CFC-11 export was carried out by verifying 1 of 1 transaction of Customs Declaration Form.

- One transaction of documentation (100.00% of verified documentation) is not consistent with the record of DIW;

  The 1 transaction of documentation is listed by importer as follows:

  1. Bangkok Intigrated Co., Ltd.

For DIW side, documentations that have been verified comprise of

- Import/Export Clearance Form approved by DIW :
- A copy of Import/Export License:
- Invoices;
- Bills of Lading;

For CD side, documentation that have been verified comprised of

- Printouts of CD on Import/Export of these chemicals :
- Declaration Forms :
- Import/Export Clearance Form approved by DIW :
- A copy of Import/Export License:
- Invoices:
- Bills of Lading:

From the verification, it was note that there were some discrepancies between total imports/exports received from the record of DIW and imports/exports received from the record of CD, which could be summarized as follows:

Import of CFC-12 (Harmonized Code 2903420.000): Given the 20 from 70 audited Customs Declaration Forms, the verification could identify reason for discrepancy of 122.20 MT from the total import amount of 1,395.2374 MT from the record of CD. Based on the available document, audit verifications of Customs Declaration Form revealed the followings:

(i) 18.00 MT of CFC-12 imported by "Thasco Chemical Co., Ltd." was not computed in the record of CD. From the verification of Customs Declaration Form, the importer obtained import clearance from DIW and the amount has actually been imported. The relevant supporting documents are:

No	Type of Supporting Document Verified			Type of Controlled Substance	Accurate Quantity (MT)
	Customs Declaration Form	Invoice No.	Import Clearance No.		
1	0321-00846-02585 (15/08/2003)	D-SC-012909 (23/07/2003)	08987 (31/07/2003)	CFC-12	18.00

(ii) 20.00 MT of HCFC-22 (Harmonized Code 2903490.022) imported by "Numthai Equipment Co., Ltd." was wrongly declared to be CFC-12 in Customs Declaration Form. Audit revealed that the importer actually imported HCFC-22. The relevant supporting documents are:

No	Type of Supporting Document Verified			Type of Controlled Substance	Accurate Quantity (MT)
	Customs Declaration Form	Invoice No.	Import Clearance No.		
1	0110-00446-00135 (10/04/2003)	NUM/REF/0295 (12/03/2003)	04193 (09/04/2003)	HCFC-22	20.00

(iii) 102.20 MT of HCFC-22 (Harmonized Code 2903490.022) imported by "Refrigo Equipment Co., Ltd." was wrongly declared to be CFC-12 in the Customs Declaration Form. The audit revealed that the importer actually imported HCFC-22. The relevant supporting documents are:

No	Type of Supporting Document Verified			Type of Controlled Substance	Accurate Quantity (MT)
	Customs Declaration Form	Invoice No.	Import Clearance No.		
1	0321-01046-06673 (28/10/2003)	EX/FCD/5229 (23/09/2003)	12079 (15/10/2003)	R-22	23.10
2	0321-01046-04437 (17/10/2003)	DY030922C	-	R-22	28.00
3	0321-00946-06246 (25/09/2003)	EX/FCD/5193 (02/09/2003)	11016 (18/09/2003)	R-22	23.10
4	0303-00846-00077 (11/08/2003)	DY030706D	-	R-22	28.00
			Total quantity verification		102.20

Import of CFC-113 (Harmonized Code 2903430.000): Given the 1 from 1 audited Customs Declaration Form, the verification could identify reason for discrepancy of 0.04 MT from the total 0.04 MT from the record of CD. Based on the available document, audit verifications of the Customs Declaration Form revealed the following:

(i) 0.04 MT of HCFC-141b (Harmonized Code 2903490.141) imported by "Louis T Leonowens (Thailand) Co., Ltd." was wrongly declared to be CFC-113 in the Customs Declaration Form. Audit revealed that the importer actually imported HCFC-141b. The relevant supporting documents are:

No	Type of Supporting Document Verified			Type of Controlled Substance	Accurate Quantity (MT)
	Customs Declaration Form	Invoice No.	Import Clearance No.		
1	0109-00946-00067 (27/09/2003)	23WZH 3152	10221 (29/8/2003)	HCFC-141b	0.04

Export of CFC-11: 0.69 MT of CFC-11 exported by "Bangkok Integrated trading Co., Ltd." was in the record of CD but not declared to DIW. The audit revealed that it was only declared to CD through the Electronic Data Interchange (EDI) without actual shipment, as referred to letter clarified from CD to DIW dated on September 9, 2004. Throughout the data in the EDI system, there was no update on the information. The relevant supporting documents are:

No.	Type of Supporting Document Verified			Type of Controlled Substance	Accurate Quantity (MT)
	Customs Declaration Form No.	Invoice No.	Import Clearance No.		
1	0201-1034616745	-	-	CFC-11	0.69

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Export of CFC-12: 9.199 MT of CFC-12 exported by "Luck 118 Enterprise Corporation Ltd." was wrongly declared to be CFC-12 in the Customs Declaration Form. The audit revealed that the exporter actually exported COLD 12, COLD 22, and COLD 13 HEAT GAS 4060. The relevant supporting documents are:

No.	Type of Supporting Document Verified			Type of Substance	Accurate Quantity (MT)
	Customs Declaration Form No.	Invoice No.	Import Clearance No.		
1	0201-1104634554	-	-	* COLD 12, COLD 22, COLD 13 HEAT GAS 4060	9.199

Remarks: * as stated in the Customs Declaration Form

Audit examination on the documentation of CD to verify the actual import-export amount of these chemicals was carried out. The verification could be summarized in table below.

For Actual Import:

	Substances	Import Amount (MT)	No. of Shipment Imported	Customs Declaration Form Examined			Customs Declaration Form NOT Examined	
				No. of Shipment Examined	Import Amount Examined		No. of Shipment NOT Examined	Import Amount NOT Examined (MT)
					Correct (MT)	Other/ Inconsistency (MT)		
1	CFC-11	476.4350	23	5	67.365	-	18	409.0700
* 2	CFC-12	1,369.7074	70	20	263.860	-	50	1,105.8474
3	CFC-113	-	-	-	-	-	-	-
4	CFC-114	-	-	-	-	-	-	-
5	CFC-115	-	-	-	-	-	-	-
6	1,1,1-TCA	23.9000	2	2	23.900	-	-	-
7	CTC	-	-	-	-	-	-	-

Remark: * 1 shipment was not recorded in the record of CD.

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For Actual Export:

	Substances	Export Amount (MT)	No. of Shipment Exported	Customs Declaration Form Examined			Customs Declaration Form NOT Examined	
				No. of Shipment Examined	Export Amount Examined		No. of Shipment NOT Examined (MT)	Export Amount NOT Examined (MT)
					Correct (MT)	Other/ Inconsistency (MT)		
1	CFC-11	-	-	-	-	-	-	-
2	CFC-12	-	-	-	-	-	-	-
3	CFC-113	-	-	-	-	-	-	-
4	CFC-114	-	-	-	-	-	-	-
5	CFC-115	-	-	-	-	-	-	-
6	1,1,1-TCA	-	-	-	-	-	-	-
7	CTC	-	-	-	-	-	-	-

3.4 Review and summarize methodology used by the Government for data collection

Notification by the Minister of Industry requires that importers/exporters of Hazardous Substances Type 3 must submit distribution declaration report to DIW by the end of July of importing year and by the end of January of next year. This would enable DIW to inspect list of customers to whom the importers/exporters sold ODS. List of major customers purchasing the chemicals from importers/exporters was summarized as follows:

CFC-11: Given that there were 11 importers of CFC-11, whose license were issued by DIW in 2003, Distribution Declaration Forms Submitted to DIW (twice a year per importer). Based on reviewed Distribution Declaration Forms as provided by DIW, it was found that distribution chains of CFC-11 in 2003 were to (i) Other importers and distributors, (ii) The manufacturers of foam products that still require CFC-11 for their manufacturing process and (iii) refrigerant for Chiller through distributors.

CFC-12: Given that there were 13 importers of CFC-12, whose license were issued by DIW in 2003, Distribution Declaration Forms submitted to DIW (twice a year per importer). Based on reviewed Distribution Declaration Forms as provided by DIW, it was found that distribution chains of CFC-12 in 2003 were to service shops of mobile air-conditioning and refrigeration through distributors.

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1,1,1-TCA: Given that there were 2 importers of 1,1,1-TCA, whose license were issued by DIW in 2003, Distribution Declaration Forms submitted to DIW (twice a year per importer). Based on reviewed Distribution Declaration Forms as provided by DIW, it was found that distribution chains of 1,1,1-TCA in 2003 were to (i) Electricity Generating Authority of Thailand, (ii) The manufacturer of golf equipment in cleaning process.

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Chapter IV
Conclusion

Process for issue of import quota for the year 2003: The audit examination revealed that DIW has properly controlled and adhered to the procedures of issuing import quota and licenses, in accordance with Ministry of Industry's Notification issued under the Hazardous Substances Act B.E.2535 and decision made by the Hazardous Substances Committee.

Actual import consumption: The audit examination revealed that actual permits to the importers were correctly licensed and within the quotas issued to importers as follows:

(i) Imported were 476.435 MT of CFC-11, 1,369.7074 MT of CFC-12, and 23.90 MT of 1,1,1-TCA.

(ii) CFC-113, CFC-114, CFC-115 and CTC were not imported.

Actual export consumption: As shown in table of export of CFC-11 (page 14), it was declared by CD through the Electronic Data Interchange (EDI) without actual shipment. And the table of export of CFC-12 (page 15) showed that the substance exported was not the controlled chemicals. Therefore, there was no export amount in year 2003.

Quotas issued to importers: Quotas issued to importers through import licenses were carried out in accordance with maximum allowable quantity. Total permit through import/export licenses did not exceed the maximum allowable consumption level as compliant in the agreement between the Government of Thailand and the Executive Committee.

Reliability of the data between DIW and CD in the year 2003: The document process and the data records from DIW have been found to be consistency and correctly recorded with supporting document whilst there were some discrepancies in documents and records from CD. Therefore, reliability of data from DIW is dominant and considers as principal data in import/export verification for the year 2003.

APPENDIX

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Appendix 1

ALLOWABLE IMPORT LEVEL OF CONTROLLED SUBSTANCES

A: Allowable Import Level of Controlled Substance as Permitted by DIW against the Hazardous Substances Import License

	Importers	CFC-11 (ODP MT)	CFC-12 (ODP MT)	CFC-113 (ODP MT)	CFC-114 (ODP MT)	CFC-115 (ODP MT)	1,1,1-TCA (ODP MT)	CTC (ODP MT)
1	AUSINEE	-	168.93	-	-	-	-	-
2	BERLI JUCKER SPECIALTY	69.68	127.26	-	-	-	-	-
3	COOLMAN CORPORATION	-	62.69	-	-	-	-	-
4	DAIKA (THAI)	-	-	-	-	-	1.35	-
5	I.C.P.CHEMICALS	23.40	67.85	-	-	-	-	-
6	INDUSTRIAL TRADE	51.02	47.21	-	-	-	-	-
7	DOT BAMBOO (BANGKOK)	-	284.42	-	-	-	-	-
8	JITHRONG CHEMICAL	-	-	-	-	-	-	-
9	KULTHORN ENGINEERING	-	28.05	-	-	-	-	-
10	NUMTHAI EQUIPMENT	-	-	-	-	-	-	-
11	PACIFIC UNITRADE	79.60	-	-	-	-	-	-
12	REFRIGO EQUIPMENT	12.91	42.08	-	-	-	-	-
13	SOUTH CITY PETROCHEM	39.74	-	-	-	-	-	-
14	SUPERCON (FAR EAST)	69.10	-	-	-	-	-	-
15	THAI OSNOR	-	-	-	-	-	-	-
16	THASCO CHEMICAL	48.47	237.33	-	-	-	-	-
17	THE EAST ASIATIC (THAILAND)PUBLIC	70.10	-	-	-	-	-	-
18	TOMEN (THAILAND)	133.43	327.86	-	-	-	-	-
19	TOYOKOKI INTER	-	100.69	-	-	-	-	-
20	UNION TRADING	53.46	100.78	-	-	-	-	-
21	WEBPAK GROUP	-	-	-	-	-	1.04	-
22	LOUIS T LEONOWENS (THAILAND)	-	-	-	-	-	-	-
	TOTAL PER AUDIT	**650.91**	**1,595.15**	-	-	-	**2.39**	-
	TOTAL PER RECORD OF DIW	**650.91**	**1,644.99**	-	-	-	**2.39**	-
	DIFFERENCE	-	***(49.84)**	-	-	-	-	

Remark: *= The East Asiatic (Thailand) Public Company Limited cancelled one of their licenses.

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B: Actual Quantity of Controlled Substances Imported during the Calendar Year 2003

	Importer	CFC-11						CFC-12					
		CD Database			Total Import Amount Captured from DIW (MT)	Difference (MT)		CD Database			Total Import Amount Captured from CD (MT)	Total Import Amount Captured from DIW (MT)	Difference (MT)
		Verification Result						Verification Result					
		Import Amount Proven (MT)	Import Amount Identified as Other Substances (MT)	Import Amount NOT Examined (MT)				Import Amount Proven (MT)	Import Amount Identified as Other Substances (MT)	Import Amount NOT Examined (MT)			
1	AUSINEE	-	-	-	-	-	-	36.200	-	132.0200	168.2200	168.2200	-
2	BERLI JUCKER SPECIALTY	14.220	-	55.460	69.680	69.680	-	23.740	-	72.0200	95.7600	95.7600	-
3	COOLMAN CORPORATION	-	-	-	-	-	-	20.000	-	20.0000	40.0000	40.0000	-
4	DAIKA (THAI)	-	-	-	-	-	-	-	-	-	-	-	-
5	I.C.P.CHEMICALS	4.500	-	18.900	23.400	23.400	-	9.570	-	48.7200	58.2900	58.2900	-
6	INDUSTRIAL TRADE	-	-	13.500	13.500	13.500	-	13.720	-	33.4900	47.2100	47.2100	-
7	DOT BAMBOO (BANGKOK)	-	-	-	-	-	-	42.630	-	121.7824	164.4124	243.0824	*(78.67)
8	JITHRONG CHEMICAL	-	-	-	-	-	-	-	-	-	-	-	-
9	KULTHORN ENGINEERING	-	-	-	-	-	-	-	-	27.9650	27.9650	27.9650	-
10	NUMTHAI EQUIPMENT	-	-	-	-	-	-	-	20.00	-	20.0000	-	**20.00
11	PACIFIC UNITRADE	-	-	36.000	36.000	36.000	-	-	-	-	-	-	-
12	REFRIGO EQUIPMENT	11.925	-	-	11.925	11.925	-	-	102.20	33.6600	135.8600	33.6600	***102.20
13	SOUTH CITY PETROCHEM	-	-	19.720	19.720	19.720	-	-	-	-	-	-	
14	SUPERCON (FAR EAST)	-	-	51.895	51.895	51.895	-	-	-	-	-	-	
15	THAI OSNOR	-	-	-	-	-	-	-	-	-	-	-	
16	THASCO CHEMICAL	17.820	-	30.645	48.465	48.465	-	36.000	-	136.1400	172.1400	190.1400	****(18.00)
17	THE EAST ASIATIC (THAILAND)PUBLIC	-	-	69.930	69.930	69.930	-	64.000	-	213.0000	277.0000	277.0000	-
18	TOMEN (THAILAND)	18.900	-	95.200	114.100	114.100	-	-	-	-	-	-	-
19	TOYOKOKI INTER	-	-	-	-	-	-	18.000	-	69.6000	87.6000	87.6000	-
20	UNION TRADING	-	-	17.820	17.820	17.820	-	-	-	100.7800	100.7800	100.7800	-
21	WEBPAK GROUP	-	-	-	-	-	-	-	-	-	-	-	-
22	LOUIS T LEONOWENS	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL	**67.365**	**-**	**409.070**	**476.435**	**476.435**	**-**	**263.86**	**122.20**	**1,009.1774**	**1,395.2374**	**1,369.7074**	**25.53**

Remarks : * = This amount represented quota of 2003 which actual import on January 6, 2004 and January 12, 2004.
** = See explanation in Chapter III, page 13.
*** = See explanation in Chapter III, page 13 and 14.
**** = See explanation in Chapter III, page 13.

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B: Actual Quantity of Controlled Substances Imported during the Calendar Year 2003 (Continued)

	Importer	CFC-113						1,1,1-TCA					
		CD Database			Total Import Amount Captured from CD (MT)	Total Import Amount Captured from DIW (MT)	Difference (MT)	CD Database			Total Import Amount Captured from CD (MT))	Total Import Amount Captured from DIW (MT)	Difference (MT)
		Verification Result						Verification Result					
		Import Amount Proven (MT)	Import Amount Identified as Other Substances (MT)	Import Amount NOT Examined (MT)				Import Amount Proven (MT)	Import Amount Identified as Other Substances (MT)	Import Amount NOT Examined (MT)			
1	AUSINEE	-	-	-	-	-	-	-	-	-	-	-	
2	BERLI JUCKER SPECIALTY	-	-	-	-	-	-	-	-	-	-	-	
3	COOLMAN CORPORATION	-	-	-	-	-	-	-	-	-	-	-	
4	DAIKA (THAI)	-	-	-	-	-	-	13.50	-	-	13.50	13.50	
5	I.C.P.CHEMICALS	-	-	-	-	-	-	-	-	-	-	-	
6	INDUSTRIAL TRADE	-	-	-	-	-	-	-	-	-	-	-	
7	DOT BAMBOO (BANGKOK)	-	-	-	-	-	-	-	-	-	-	-	
8	JITHRONG CHEMICAL	-	-	-	-	-	-	-	-	-	-	-	
9	KULTHORN ENGINEERING	-	-	-	-	-	-	-	-	-	-	-	
10	NUMTHAI EQUIPMENT	-	-	-	-	-	-	-	-	-	-	-	
11	PACIFIC UNITRADE	-	-	-	-	-	-	-	-	-	-	-	
12	REFRIGO EQUIPMENT	-	-	-	-	-	-	-	-	-	-	-	
13	SOUTH CITY PETROCHEM	-	-	-	-	-	-	-	-	-	-	-	
14	SUPERCON (FAR EAST)	-	-	-	-	-	-	-	-	-	-	-	
15	THAI OSNOR	-	-	-	-	-	-	-	-	-	-	-	
16	THASCO CHEMICAL	-	-	-	-	-	-	-	-	-	-	-	
17	THE EAST ASIATIC (THAILAND)PUBLIC	-	-	-	-	-	-	-	-	-	-	-	
18	TOMEN (THAILAND)	-	-	-	-	-	-	-	-	-	-	-	
19	TOYOKOKI INTER	-	-	-	-	-	-	-	-	-	-	-	
20	UNION TRADING	-	-	-	-	-	-	-	-	-	-	-	
21	WEBPAK GROUP	-	-	-	-	-	-	10.40	-	-	10.40	10.40	
22	LOUIS T LEONOWENS	-	0.04	-	0.04	-	*0.04	-	-	-	-	-	
	TOTAL	-	**0.04**	-	**0.04**	-	**0.04**	**23.90**	-	-	**23.90**	**23.90**	

Remark: *= See explanation in Chapter III, page 14.

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ALLOWABLE EXPORT LEVEL OF CONTROLLED SUBSTANCES

C : Allowable Export Level of Controlled Substance as Permitted by DIW against the ODS Import License

	Exporters	CFC-11 (ODP MT)	CFC-12 (ODP MT)	CFC-113 (ODP MT)	CFC-114 (ODP MT)	CFC-115 (ODP MT)	1,1,1-TCA (ODP MT)	CTC (ODP MT)
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	TOTAL	-	-	-	-	-	-	-

Remark: No exporter requested for export of CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, 1,1,1-TCA and CTC for the year 2003.

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D : Actual Quantity of Controlled Substances Exported during the Calendar Year 2003 (1 January 2003 – 31 December 2003)

	Importer	CFC-11						CFC-12					
		CD Database			Total Export Amount Captured from CD (MT)	Total Export Amount Captured from DIW (MT)	Difference (MT)	CD Database			Total Export Amount Captured from CD (MT)	Total Export Amount Captured from DIW (MT)	Difference (MT)
		Verification Result						Verification Result					
		Export Amount Proven (MT)	Export Amount Identified as Other Substances (MT)	Export Amount NOT Examined (MT)				Export Amount Proven (MT)	Export Amount Identified as Other Substances (MT)	Export Amount NOT Examined (MT)			
1	BANGKOK INTIGRATED TRADING	-	0.69	-	0.69	-	0.69	-	-	-	-	-	-
2	LUCK 118 ENTERPRISE	-	-	-	-	-	-	-	9.199	-	9.199	-	9.199
	TOTAL	**-**	**0.69**	**-**	**0.69**	**-**	***0.69**	**-**	**9.199**	**-**	**9.199**	**-**	****9.199**

Remarks : * = See explanation in Chapter III, page 14.
** = See explanation in Chapter III, page 15.

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Appendix 2

LIST OF SUPPORTING DOCUMENTS

Import of CFC-11

1. ICP CHEMICALS CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0511-0094600328 (26/09/2003)	649-650/2205.2206/03 (26/08/2003)	11282 (25/09/2003)	CFC-11	4.50

2. BERLI JUCKER SPECIALTY CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0581-0104600987 (15/10/2003)	EX/FCD/5217 (19/09/2003)	11669 (03/10/2003)	CFC-11	14.22

3. TOMEN (THAILAND) CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0111-0064603081 (26/06/2003)	305/2103/03-04 (05/06/2003)	07446 (24/06/2003)	CFC-11	18.90

4. THASCO CHEMICAL CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0321-00346-00373 (07/03/2003)	D-SC-012040 (11/02/2003)	02271 (25/02/2003)	CFC-11	17.82

5. REFRIGO EQUIPMENT CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0321-00746-01816 (08/07/2003)	EX/FCD/5080 (30/05/2003)	07526 (25/06/2003)	CFC-11	11.925

Import of CFC-12

1. NUMTHAI EQUIPMENT CO.,LTD

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0110-00446-0013 (10/04/2003)	NUM/REF/0295 (12/03/2003)	-	R-22	20.00

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2. DOT BAMBOO (BANGKOK) CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0110-00146-00305 (16/01/2003)	112417 (09/12/2002)	00427 (10/01/2003)	CFC-12	18.28
2	0110-00546-00004 (26/05/2003)	119436 (30/04/2003)	06060 (22/05/2003)	CFC-12	18.91
3	0110/00846-00369 (19/08/2003)	124280 (14/08/2003)	09668 (18/08/2003)	CFC-12	5.44
			Total quantity verification		42.63

3. EAST ASIATIC (THAILAND) PUBLIC CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0101-00846-03632	TRE-032E (22/08/2003)	10047 (27/08/2003)	CFC-12	32.00
2	0101-00346-00125	TRE-002E (24/11/2003)	2555 (03/03/2003)	CFC-12	32.00
			Total quantity verification		64.00

4. AUSINEE CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0511-00346-00072 (06/03/2003)	114707 (05/02/2003)	02490 (28/02/2003)	CFC-12	19.14
2	0110-01246-00080 (11/12/2003)	128849 (03/11/2003)	13903 (24/11/2003)	CFC-12	17.06
			Total quantity verification		36.20

5. COOLMAN CORPORATION CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0321-00246-04592 (20/02/2003)	CLM/REF/0247 (30/01/2003)	01905 (14/02/2003)	CFC-12	20.00

6. TOYOKOKI INTER CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0581-00446-01147 (17/04/2004)	TOY/REF/0299 (14/03/2003)	04246 (09/04/2003)	CFC-12	18.00

7. INDUSTRIAL TRADE CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0110-00846-00434 (22/08/2003)	ITL/REF/0132	09716 (18/08/2003)	CFC-12	13.72

8. ICP CHEMICALS CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0511-00946-00328 (25/09/2003)	649-650/2205.2206/03 (26/08/2003)	11281 (25/09/2003)	CFC-12	9.57

9. THASCO CHEMICAL CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0321/00946/04125 (22/09/2003)	D-SC-013140 (28/08/2003)	10516 (05/09/2003)	CFC-12	18.00
2	0321-00546-03346 (21/05/2003)	D-SC-012430 (21/04/2003)	05287 (06/05/2003)	CFC-12	18.00
			Total quantity verification		36.00

10. BERLI JUCKER SPECIALTY CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0101-00246-02949	115021 (20/02/2003)	02229 (24/02/2003)	CFC-12	12.24
2	0581-01046-01267	EX/FCD/5225 (22/9/2003)	11668 (3/10/2003)	CFC-12	11.50
			Total quantity verification		23.74

11. REFRIGO EQUIPMENT CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0321-01046-06673 (28/10/2003)	EX/FCD/5229 (23/09/2003)	12079 (15/10/2003)	R-22	23.10
2	0321-01046-04437 (17/10/2003)	DY030922C	-	R-22	28.00
3	0321-00946-06246 (25/09/2003)	EX/FCD/5193 (02/09/2003)	11016 (18/09/2003)	R-22	23.10
4	0303-00846-00077 (11/08/2003)	-	-	R-22	28.00
			Total quantity verification		102.20

Import of CFC-113

1. LOUIS T LEONOWENS (THAILAND) CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	0109-00946-00067 (02/09/2003)	23WZH 3152 (20/08/2003)	-	HCFC-141B	0.04

Import of CFC-114 and CFC-115

Based on statistic data received from DIW and CD, audit examination revealed that there was no import of CFC-114 and CFC-115 during the year 2003.

Import of 1,1,1-Trichloroethane

1. WEBPAK GROUP CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	01063 (27/01/2003)	EA2011 (14/01/2003)	0109-0014601747 (30/01/2003)	1,1,1-TCA	10.40

2. DAIKA (THAI) INC., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Import Clearance No.		
1	08539-08540 (21/07/2003)	4W168T1000 (16/07/2003)	0581-0074601970 (25/07/2003)	1,1,1-TCA	13.50

Import of Carbon Tetrachloride (CTC)

Based on statistic data received from DIW and CD, audit examination revealed that there was no import of Carbon Tetrachloride during the year 2003.

Export of CFC-11

1. BANGKOK INTIGRATED TRADING CO., LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Export Clearance No.		
1	0201-10346-16745	-	-	CFC-11	0.69

Export of CFC-12

1. LUCK 118 ENTERPRISE CORPORATION LTD.

No	Type of Supporting Document Verified			Type of Controlling Substance	Quantity (MT)
	Declaration Form No.	Invoice No.	Export Clearance No.		
1	0201-1104634554	-	-	COLD 12, COLD 22, COLD 13 HEAT GAS 4060	9.199

Export of CFC-113, CFC-114, CFC-115, 1,1,1-TCA and Carbon Tetrachloride (CTC)

Based on statistic data received from DIW and CD, audit examination revealed that there was no import of CFC-113, CFC-114, CFC-115, 1,1,1-TCA and Carbon Tetrachloride (CTC) during the year 2003.