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COMITÉ EXÉCUTIF DU FONDS MULTILATÉRAL AUX FINS D'APPLICATION DU PROTOCOLE DE MONTRÉAL Quarantième réunion Montréal, 16 - 18 juillet 2003

PROPOSITION DE PROJET: CHINE

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

Solvants

Élimination des SAO dans le secteur des solvants : programme annuel de mise en oeuvre de 2003

Mise à jour du rapport périodique de 2002 et du programme annuel de mise en œuvre pour l'année 2003 du plan du secteur des solvants de la Chine

DESCRIPTION DU PROJET ET OBSERVATIONS DU SECRÉTARIAT

Renseignements généraux

- 1. Le PNUD, au nom du gouvernement de la Chine, présente au Comité exécutif aux fins d'examen une mise à jour du rapport périodique annuel de 2002 et du programme de mise en œuvre pour l'année 2003 en vertu de l'accord relatif au plan d'élimination des SAO dans le secteur des solvants en Chine (le plan). Les documents sont joints aux présentes en version intégrale à l'annexe 1.
- 2. L'accord a été approuvé en principe à la 30^e réunion du Comité exécutif au mois de mars 2000, au coût total de 52 millions \$US. Des tranches de financement de 6,75 millions \$US, 6 955 millions \$US et de 6,33 millions \$US, plus 10 pour cent en coûts d'appui, ont été approuvées entre la 30^e et la 36^e réunion du Comité exécutif dans le cadre de programmes annuels de mise en œuvre se terminant à la fin de 2002.
- 3. Le décaissement des fonds pour 2002 n'a été accordé qu'à la 38^e réunion (décision 38/61) après que la Chine et le PNUD aient respecté la disposition de l'accord les obligeant à rapporter les quantités de CFC achetées par les différentes usines en 2000 aux fins exemptées de matières premières et d'agent de transformation.
- 4. Dans sa décision 38/61, le Comité exécutif a également accepté d'examiner le programme annuel de mise en œuvre pour l'année 2003 à sa 39^e réunion. Le projet n'a toutefois pas été présenté à cette réunion car la Chine n'avait pas encore satisfait à l'obligation de rapporter ses données sur la consommation de CTC en 2001.

La mise à jour du rapport périodique de 2002

5. La mise à jour du rapport périodique porte sur les différentes questions soulevées par le Secrétariat dans ses documents pour la 38^e réunion (UNEP/OzL.Pro/ExCom/38/27, pages 26 à 31, et Add. 2). Cette description de projet et les observations du Secrétariat ont été préparées en supplément à l'information fournie à la 38^e réunion.

Données sur la consommation de CTC dans les entreprises aux fins de matières premières et d'agent de transformation

6. Conformément à l'accord, la section D (pages 9 à 14) de la mise à jour du rapport périodique propose une liste par entreprise de tous les CTC utilisés pour les matières premières, les agents de transformation et les utilisations comme agents de transformation qui n'ont pas encore approuvées par les Parties, pour l'année 2001. La quantité totale utilisée est de 56 434,6 tonnes PAO, ce qui se situe sous le plafond de 71 500 tonnes PAO précisé dans l'accord.

- 7. La mise à jour du rapport périodique indique également qu'une quantité totale de 655,5 tonnes PAO de CFC-113 a été consommée comme matière première en 2001. L'accord prévoit une consommation maximum de 10 tonnes PAO à ces fins. Le rapport précise également que « les 819,40 tonnes de CFC-113 [655,5 tonnes PAO] ont été reconverties chimiquement en CFC-114/115, CFTE ou CFC-113a, et n'ont pas été comptées comme des matières premières ». Selon l'interprétation du Secrétariat, la reconversion chimique est l'élément principal de la définition de l'utilisation comme matière première. Par conséquent, les 655 tonnes PAO semblent être utilisées comme matière première, et dépassent la limite de 10 tonnes PAO établie dans l'accord. La limite de 10 tonnes PAO a aussi été dépassée en 2000 (consommation totale rapportée aux fins de matière première : 196 tonnes PAO), mais le Comité exécutif a néanmoins approuvé le programme annuel de 2002. En ce qui concerne l'utilisation du CFC-113 comme matière première au cours des prochaines années, le PNUD a indiqué que la Chine limitera sa production de CFC-113 au niveau maximum suffisant pour couvrir les limites prévues à l'accord pour les utilisations comme solvants, matières premières et agents de transformation (paragraphe 9 de la partie II du rapport du PNUD). Le PNUD a aussi indiqué dans ses précisions au Secrétariat que la Chine avait pris des mesures sévères depuis 2002 afin de contrôler les utilisations du CFC-113.
- 8. La quantité de CTC utilisée en 2001 à des fins qui ne sont pas encore classées comme des agents de transformation s'élève à 4 073,3 tonnes. Bien qu'il n'y ait aucun lien avec le plan du secteur des solvants, le Secrétariat prend note que cette quantité représente 3 300 tonnes métriques de moins que la consommation maximum destinée à cet usage en 2002 (la première année visée), précisée dans l'accord sur l'élimination de la production et la consommation de CTC en Chine approuvé à la 38^e réunion du Comité exécutif.

Contrats de réduction des SAO

9. Le PNUD confirme dans la section C de la mise à jour du rapport périodique (paragraphe 9) que la Chine a atteint ses objectifs du programme de mise en œuvre relativement à la signature de contrats d'élimination du CFC-113 et du TCA. En ce qui concerne le CTC, un manque à gagner de 28,7 tonnes PAO persiste par rapport à l'élimination prévue au moyen de contrats de réduction du CTC. Cependant, il est indiqué que la consommation générale du CTC est à la baisse et qu'elle demeure à l'intérieur des limites prévues dans l'accord (voir la section vérification et confirmation ci-dessous).

Réalisation des futurs objectifs de contrôle

- 10. En réponse aux questions précédentes du Secrétariat sur les obstacles possibles à la réalisation des objectifs de contrôle précisés dans l'accord, le PNUD a indiqué à la section C, paragraphe 7 de son rapport, que la Chine édictera des réglementations afin de contrôler la consommation de SAO, et émettra des certificats pour la consommation de solvants à base de SAO. Les réglementations pertinentes pour le CFC-113 et le TCA ont été émises en juillet 2002.
- 11. En ce qui concerne le CTC, la section C, paragraphe 11, précise que la Chine a formulé des mesures législatives interdisant l'utilisation du CTC comme solvant, qui devraient entrer en vigueur le 1^{er} juin 2003. Il est rapporté que la Chine estime ainsi que la consommation de CTC comme solvant aura été éliminée avant le mois de janvier 2004, comme l'exige l'accord.

Vérification et confirmation des objectifs de contrôle précédents

- 12. Ayant constaté le manque à gagner persistant dans les contrats de réduction du CTC avant la 38^e réunion, le Secrétariat a demandé des précisions sur la réduction rapportée de la consommation de CTC comme solvant à un niveau de 59,6 tonnes PAO en 2001 (par rapport à la limite de 110 tonnes PAO). Le PNUD a indiqué (section C, paragraphe 10 du rapport révisé) qu'une deuxième vérification menée par une entreprise indépendante de vérificateurs a confirmé une consommation de 20,7 tonnes PAO par un échantillon de 34 entreprises. L'échantillon était le même que celui utilisé pour la consommation nationale sectorielle originale de CTC, qui regroupait alors 38,3 pour cent du sous-secteur de la consommation de CTC (les 61,7 pour cent restants ayant été consommés par de petites entreprises non identifiées). Augmenté à l'échelle dans le but de regrouper tout le sous-secteur des CTC, l'échantillonnage de consommation représentait une consommation totale de 59,6 tonnes PAO pour l'ensemble du sous-secteur en 2001. Le rapport indique donc que l'objectif de consommation a été atteint.
- 13. En ce qui concerne le CFC-113 et le TCA, le rapport périodique précédent ne contenait aucune information sur la vérification des limites nationales de consommation de 2001. La mise à jour du rapport indique qu'en plus du Bureau national de vérification de la Chine, les données de production, d'importation et d'exportation du CFC-113 et du TCA ont aussi été vérifiées par des vérificateurs indépendants. Le PNUD a indiqué que les données de production du CFC-113 sont les mêmes que celles rapportées pour le secteur de la production. Les données sur l'importation et l'exportation sont les chiffres qui figurent dans les dossiers officiels des services douaniers. Les données vérifiées et la consommation qui en découle sont indiquées dans le tableau 3 à la page 10 du rapport révisé. Toutes les données rapportées se situent à l'intérieur des limites précisées dans l'accord.

Décision 33/46 : Production d'un solvant de remplacement contenant du nPB

- 14. La mise à jour du rapport périodique du PNUD soulève une question sur la mise en œuvre de la décision 33/46, en vertu de laquelle le Comité exécutif accepte de réaffecter 2 millions \$US approuvés pour le programme de mise en œuvre de 2000-2001 à la conception et la production locales d'un solvant de remplacement. Le solvant de remplacement contiendrait approximativement de 60 à 70 pour cent de bromure de n-propyle. Cet accord a été fait sous réserve que la Chine « surveille et s'assure que la Chine n'exporte aucun bromure de n-propyle. » Le PNUD précise dans les paragraphes 22 et 23 de la partie C de la mise à jour du rapport périodique, que l'agence d'état pour la protection de l'environnement (SEPA) ne pourra pas appliquer les contrôles d'exportation du bromure de n-propyle. Le PNUD a averti la Chine de ne pas utiliser de fonds provenant des 2 millions \$US pour produire du bromure de n-propyle, et la Chine a demandé conseil sur la façon de procéder, car elle est incapable de mettre en œuvre toutes les dispositions de la décision 36/46.
- 15. La question du contrôle des exportations de bromure de n-propyle n'aurait pas sa raison d'être si le Comité exécutif devait retirer son approbation de réaffecter des fonds et que la Chine retournait les sommes afin qu'elles soient utilisées comme prévu à l'origine dans le plan du secteur des solvants.

Maintien du PNUD comme agence d'exécution

16. L'accord précise que le PNUD serait l'agence d'exécution pour les trois premières années à un taux de 10 pour cent des sommes affectées pendant cette période, conformément aux dispositions de l'accord. Le taux pour les années subséquentes doit être convenu entre le Comité exécutif et l'agence d'exécution du projet. Il est indiqué dans la mise à jour du rapport périodique que la Chine et le PNUD demandent au Comité exécutif de maintenir le PNUD comme agence d'exécution pour le reste de la période 2003-2010. En vertu de la décision 38/68, il pourrait être de mise de déterminer des coûts d'appui de 7,5 pour cent pour le reste du projet.

Mise à jour du programme annuel de mise en œuvre pour l'année 2003

- 17. En ce qui concerne l'atteinte des niveaux d'élimination prévus au moyen de contrats de réduction conclus avec des entreprises individuelles, le PNUD a indiqué dans une mise à jour du programme annuel de mise en œuvre que « des efforts spéciaux porteront dorénavant sur le contact direct et la négociation avec les consommateurs initiaux de solvants identifiés dans les études lors de la préparation du plan d'élimination sectoriel au lieu de faire appel au processus d'appel d'offres » (partie II, paragraphe 4). Des mesures supplémentaires pour identifier les entreprises sont mentionnées au paragraphe 7, dont le recours aux associations industrielles, et aux institutions régionales et provinciales. La Chine a également édicté des réglementations visant à contrôler la consommation de SAO par les sources d'offre et de demande, et à interdire l'utilisation du CTC comme solvant de nettoyage à partir du 1^{er} juin 2003.
- 18. La vérification financière menée par le Bureau national de vérification de la Chine (CNAO) a relevé plusieurs problèmes administratifs qui doivent être réglés. Cependant, le programme annuel pour l'année 2003 ne contient pas d'information sur les mesures à prendre en réponse au rapport. Le PNUD a laissé savoir que deux points soulevés dans le rapport de vérification du CNAO sur la consommation et la faillite ont été corrigés. Le PNUD indique que les autres questions financières et de gestion sur l'utilisation appropriée des fonds du Fonds multilatéral, la modification opportune des contrats de réduction, la supervision et la gestion adéquates des activités d'élimination, et la documentation pertinente de la destruction de l'équipement, seront réglées au moyen d'une meilleure formation :
 - a) du personnel de la SEPA, des bureaux environnementaux de district et des autres décideurs, afin qu'ils comprennent mieux les règles du Fonds et du PNUD, et renforcent leurs ressources de gestion;
 - b) des consommateurs de solvants à base de SAO, afin d'améliorer leurs connaissances sur la façon de participer aux activités du système de contrat et de justificatif de réduction des SAO, la façon d'obtenir des fonds afin d'entreprendre des activités d'élimination opportunes, et la façon d'assurer une gestion financière et administrative efficace des activités d'élimination et des subventions du Fonds multilatéral; et

- c) du groupe de travail sur les solvants et le personnel de l'agence nationale de mise en oeuvre, afin d'améliorer la supervision, la surveillance et la mise en œuvre opportune des activités d'élimination.
- 19. Afin de favoriser la transparence relativement aux progrès dans la mise en œuvre, et à la demande du Secrétariat, le PNUD a modifié le tableau des indicateurs d'efficacité du programme annuel (tableau 11) afin d'y indiquer, en plus des objectifs généraux de consommation à atteindre, les quantités à éliminer en 2003 au moyen des contrats de réduction dans les entreprises conclus en 2001 et 2002. Cet ajout fournira des informations sur le niveau d'élimination réalisé par le biais d'activités financées pour la reconversion des entreprises et le niveau d'élimination réalisé grâce à d'autres mesures telles que les réductions non financées de la consommation et le contrôle des approvisionnements.

RECOMMANDATION

- 20. À partir de l'information ci-dessus, le Comité exécutif pourrait souhaiter :
 - a) examiner l'approche qu'il souhaiterait adopter concernant le non-respect de la limite de 10 tonnes PAO précisée dans l'accord pour l'utilisation du CFC-113 comme matière première;
 - b) accepter de maintenir le PNUD comme agence d'exécution pour le reste du projet, à un niveau d'appui de 7,5 pour cent;
 - c) déterminer, à partir de son point de vue sur a) ci-dessus, s'il désire approuver un financement de 5 775 000 \$US, plus les coûts d'appui de 433 125 \$US pour le programme annuel de mise en œuvre pour l'année 2003 proposé pour le plan du secteur des solvants de la Chine; et
 - d) demander au gouvernement de la Chine de retourner le montant de 2 millions \$US réaffecté en vertu de la décision 36/46 afin qu'il soit utilisé aux fins prévues initialement dans le plan du secteur des solvants.

Annex I

SOLVENT SECTOR PLAN FOR ODS PHASE-OUT IN CHINA

2003 ANNUAL IMPLEMENTATION PROGRAMME

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PART I PROGRESS REPORT

A. INTRODUCTION

- 1. Solvent Sector Plan for ODS Phase out in China was approved by the Executive Committee at its 30th Meeting to phase out the consumption of CFC-113, TCA and CTC used as cleaning solvents in China by 1 January 2006, 1 January 2010 and 1 January 2004 respectively.
- 2. Two funding tranches in the amount of \$6,750,000 and \$6,955,000 were released in 2000 and 2001 for the implementation of the 2000 2001 First Implementation Programme. The third tranche in the amount of \$6,330,000 was released in November 2002 for the implementation of the 2002 Annual Implementation Programme.
- 3. In accordance with the "Agreement for ODS Phaseout in China's Solvent Sector" (UNEP/OzL.Pro/ExCom/30/41 Annex IV), the Executive Committee is hereby requested by China to approve the 2003 Annual Implementation Programme and release the fourth tranche in the amount of \$5,755,000 and the corresponding support fees for the implementation of the 2003 Annual Implementation Programme. With this funding tranche, China will be able to continue enterprise level phase out activities, conduct technical assistance activities and undertake policy actions to phase out solvents so that the 2004 consumption in the solvent sector will not exceed the consumption control limit of 1,602 ODP tonnes (1,100 ODP tonnes of CFC-113 and 502 ODP tonnes of TCA), and that CTC will be phased out by 1 January 2004. The 2003 Annual Implementation Programme is presented in Part II.

Table 1 Consumption Control Targets for ODS Solvents (tonnes ODP)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
CFC-113	3300	2700	2200	1700	1100	550	0^1	0^1	01	0^1	$0^{1,2}$
TCA	621	613	605	580	502	424	339	254	169	85	0^3
CTC	110	110	110	55	01	0,1	01	01	0_1	01	$0^{1,2}$
Total	4031	3423	2915	2335	1602	974	339	254	169	85	0

save for consumption of these ODS for feedstock and process agent uses.

4. Through close collaboration and cooperation, SEPA and UNDP have established an excellent mechanism and procedure to operationalize the China Solvent Sector Plan. Periodic missions of UNDP technical experts and programme management staff have established excellent working relationship and partnership with the Solvent Special Working Group (SWG), Domestic Implementing Agent (DIA), FECO/SEPA and Ministry of Information Industry (MII) staff. Activities are dictated by proper and transparent procedures. To maintain the momentum of this difficult sector phase-out plan in the consuming sector, both SEPA and UNDP request the Executive Committee to retain UNDP as the implementing agency for this sector phase-out plan, for the duration of its remaining period, 2003 – 2010.

² save for any CFC-113 consumption or CTC solvent consumption that may be agreed by the Parties to be essential for China after 2010.

³ save for any TCA solvent consumption that may be agreed by the Parties to be essential for China after 2015.

5. A 2002 Annual Progress Report was previously submitted in September 2002 to the 38th ExCom Meeting, together with a proposed implementation programme for 2003. This report updates the progress of the Sector Plan to include activities undertaken up May 2003

B. IMPLEMENTATION OF 2000 - 2001 FIRST IMPLEMENTATION PROGRAMME

- 1. Phase out activities at enterprise level continued in 2002. Majority of the equipment for the 16 ODS Reduction Contracts signed in November 2000 was produced, tested, delivered and commissioned at 13 of the 16 enterprises from May to December 2002 and consumption of solvents had ceased at these enterprises. One enterprise went bankrupt and has thus also ceased consumption of ODS. The completion of these 14 ODS Reduction Contracts contributed to the phase out of 340.135 ODP tonnes of CFC-113, 9.8 ODP tonnes of TCA and 8.36 ODP tonnes of CTC in 2002. Part of the equipment has been delivered, installed and commissioned in the remaining two enterprises, with the remaining equipment to be delivered and commissioned in July 2003. The completion of these two projects under the 2000 ODS Reduction Contracts will contribute the phase out of 38.4 ODP tonnes of CFC-113 and 0.4 ODP tonnes of TCA to the 2003 phase-out targets. Baseline equipment in all 16 enterprises will be destroyed following the national project acceptance procedures in August September 2003.
- 2. Equipment production for the 21 winning enterprises with ODS Reduction Contracts signed in July 2001 is underway and will be ready for delivery to enterprises' sites by June 2003. Installation, commissioning and testing will follow with project completion targeted for August 2003. Independent performance verification, technical evaluation and destruction of baseline equipment will take place in August and September 2003. The completion of these 21 ODS Reduction Contracts will thus contribute to the phase-out targets in 2003, with the phase out of 541.6 ODP tonnes of CFC-113 and 10.6 ODP tonnes of TCA.

C. IMPLEMENTATION OF 2002 ANNUAL IMPLEMENTATION PROGRAMME

Enterprise-Level Phase-out Activities

- 1. According to the 2002 Annual Implementation Programme, China would initiate activities in 2002 to phase-out 500 ODP tonnes of CFC-113, 25 ODP tonnes of TCA and 55 ODP tonnes of CTC by the end of 2003 through ODS Reduction Contracts and Voucher System. In accordance with the Agreement, total consumption limit for 2002 was set at 2,915 ODP tonnes, consists of a maximum level of 2,200 ODP tonnes for CFC-113, 605 ODP tonnes for TCA and 110 ODP tonnes for CTC.
- 2. Through a bidding process, 36 enterprises submitted bids by July 2002 to participate in the 2002 ODS Reduction Contract. 35 bidders were qualified, one bid was rejected because it failed to provide valid supporting documents to verify its actual ODS consumption.

- 3. The 35 successful bidding enterprises would phase out 556.3 ODP tonnes of CFC-113, 48.2 ODP tonnes of TCA and 17.9 ODP tonnes of CTC. While ODS Reduction Contracts could be awarded in August 2002, in compliance with ExCom Decisions 36/50 and 37/22 which decided that "no disbursement would occur until the required information on the use of carbon tetrachloride as a process agent (for the year 2000) has been provided" by China to the Executive Committee, UNDP did not authorized the signature of the 35 ODS Reduction Contracts until December 2002 upon approval by ExCom Decision 38/62 for UNDP to release the 2002 funding.
- 4. Because SEPA could not sign the ODS Reduction Contracts in August 2002, 3 of the 35 successful enterprises did not want to wait and decided to proceed immediately to phase out with its own funding first. As a result, only 32 ODS Reduction Contracts were signed in December 2002 to phase out 535.8 ODP tonnes of CFC-113, 43.2 ODP tonnes of TCA and 17.9 ODP tonnes of CTC, at the equivalent US dollar amount of \$4,003,881.60. The three enterprises that proceeded to phase out on its own effort will be reimbursed through retroactive reimbursement mechanism.
- 5. Technical specifications of equipment for the 32 enterprises have been completed and Procurement Notices were posted in April 2003 to invite potential bidders to participate in the international competitive bidding process. Bidding process will begin in May 2003 and contracts will be awarded in August 2003. The late release of the 2002 funding to China in November 2002 for the implementation of the 2002 Annual Implementation Programme will mean that phase-out activities will not be completed by end of 2003, thus phase-out can only be achieved in 2004, contributing only to the 2004 phase-out targets and consumption limits.
- 6. From the number of bidding document purchased during the bidding process, it can be foreseen that the phase-out activities may start to face a complicated situation. Some of the enterprises are not eligible to participate in the phase-out activity as they were established after July 25, 1995. Some enterprises consider the bidding procedure too complicated for the limited amount of grant they would receive and refused to participate in the bidding process, hence it may result in some of these enterprises prepare to phase-out at their own costs. Some enterprises are still hesitating to participate. In addition, some enterprises are not aware of the phase-out activities because of their remote locations. These ODS consuming enterprises are so scattered around that it is difficult for the SWG to find them.
- 7. To address the potential difficulty in attracting bidders to participate in the ODS reduction contract, other than intensifying its effort in the phase-out activities, China would promulgate regulation of issuing ODS Solvent Consuming Certificate to control ODS consumption from ODS production sources. Such regulation on issuance of ODS Solvent Consuming Certificate had been issued jointly by SEPA and MII in June 2002. In addition, starting 2003, China will locate and solicit enterprises through direct contacts to participate in phase-out activities, rather than through a competitive bidding process only.
- 8. The signing of the 2000, 2001 and 2002 ODS Reduction Contracts, as summarized below, will lead to the phase-out of sufficient solvents consumption to meet the annual reduction targets and the maximum consumption levels stipulated in the Agreement:

Table 2: Phase-out of 2000 – 2002 ODS Reduction Contracts

	table 2.	1 11450	2-00t 01 2t	700 20	02 00	J Iteau	MOH C	muuots		
								No. o	f	Funding
		CFC-113		TCA		CTC		Enterpri	ses	(US\$
										1,000)
		ODS	ODP	ODS	ODP	ODS	ODP			
		tons	tons	tons	tons	tons	tons			
2000	Planned	466	372.8	100	10	0	0	10 - 20		\$5,000
Bidding	Executed	473	378.5	101.6	10.2	7.6	8.36		16	\$4,132
2001	Planned	655	524	100	10	0	0	10 - 20		\$5,505
Bidding	Executed	677	541.6	106.0	10.6	0	0		21	\$4,361
2002	Planned	625	500	250	25	50	55	20 - 40		\$5,830
Bidding	Executed	669.8	535.8	431.9	43.2	16.31	17.9		32	\$4,004
Three Year	Planned	1,746	1,396.8	450	45	50	55	40 - 80		\$16,335
Cumulative Total	Executed	1,819.9	1,455.9	639.5	64.0	23.91	26.3		69	\$12,497

- 9. With the exception of CTC, the quantities of phase-out under the 2002 ODS Reduction Contracts will exceed the targets set for CFC-113 and TCA. For CTC, the phase out quantity under the 2002 ODS Reduction Contracts will have a short fall of 37 ODP tonnes. For the three-year cumulative of 2000 2002, there is a net short fall of 28.7 ODP tonnes.
- 10. In order to verify the national CTC consumption level, in addition to the performance audit already undertaken by the China National Audit Office (CNAO) from June to August 2002, SEPA and UNDP commissioned a second independent verification audit by another independent auditing firm, Beijing Zhong Tian Hua Zheng Certified Public Accountants Co. Ltd. The second audit took place in January 2003 with the aim to verify: a) the 2000 and 2001 consumption of CTC by the 34 enterprises originally identified during the preparation of the China Sector Phaseout Plan, and b) the national production level of TCA in 2000 and 2001. The finding of the second audit verified that the consumption of CTC for solvent use by these 34 enterprises were 9.07 MT in 2000 and 20.74 MT in 2001, as compared to the consumption of 38.3 MT identified in 1998. As these 34 enterprises represented 38.3% of the 1998 national consumption, by extrapolation, the national consumption of CTC in 2000 and 2001 would be 26 and 59.6 ODP tonnes respectively. Therefore even without signing sufficient phase out tonnage in 2002, SEPA and UNDP are confident that CTC consumption for 2002 will be well below the limit of 110 ODP tonnes.
- 11. Furthermore, through field investigations, SEPA found that very few enterprises are using CTC as cleaning solvent. It is believed that many of the CTC consuming enterprises have already phased out the use of CTC at its own cost, either as a result of the policies imposed on ODS use or through market force. This reduction is collaborated by the finding of the second audit that confirmed the much lower level of CTC consumption at the 34 enterprises identified in the original survey. As the remaining 61.7% of unidentified CTC consumers in the original survey were mainly small-size users, their consumption can be controlled through the

distribution channels. SEPA had formulated legislation to ban CTC for solvent use, to take effect 1 June 2003, it is therefore certain that consumption of CTC as cleaning solvent will be phased out by 1 January 2004, as stipulated in the Agreement.

Technical Assistance (TA) Activities

- 12. **Training Activities.** Training activities were conducted in Amoy in January 2002, in Beijing in February and April 2002 for over 200 participants from the candidate enterprises for the 2002 bidding. Training programme includes:
 - Introduction of Solvent Sector Plan and its execution modality;
 - Preparation of bid proposal and how the bidding will be executed;
 - Introduction by technical experts on alternative technologies;
 - Exchange and discussion between technical experts and enterprises.
- 13. A Training Workshop by international experts was conducted in Xian in August 2002 for over 100 national experts and enterprise technicians to provide the participants with:
 - Alternative cleaning process/technologies;
 - Available alternative solvents;
 - Retrofit of equipment to non-ODS cleaning applications
- 14. **Public Awareness & Promotion**. The event of issuing the Notice on ODS Solvent Usage Certificate was publicized by China Environment Protection Daily on June 27, 2002. The event of International Seminar and Training on Solvent Technology was reported and publicized by China Daily on August 15, 2002. Currently the overall promotion plan for the Solvent Sector Plan is under review by FECO/SEPA and will be implemented upon approval by FECO/SEPA. The promotion will include raising public awareness in trade journals, publications, newspaper, news media, Radio and TV.
- 15. Strengthening of Alternative Technology Support System (ATSS). To strengthen the ATSS, SWG started to identify all capable institutes or experts in the country to participate in the ATSS. To-date, a total of 33 application forms have been received, upon completion of a qualifying and approval process by SWG and FECO/SEPA, the ATSS will be further strengthened and appropriate training will be conducted for these newly identified institutes and experts.
- 16. To further build up the capacity of the national experts, an international seminar on alternative cleaning solvents and technologies were held in Xian, attended by 100 national experts and technicians from the various ODS consuming enterprises. Discussions and exchanges were made between the international and national experts, to learn from each other's experience and knowledge.
- 17. With cooperation of MII, the third Technology Center has been established at the Fifth Research Institute in Guangzhou, Guangdong Province, relevant work has been started and

capacity strengthened to provide technical assistance to the enterprises in various sub-sectors in the overall capability of measuring, testing and technical services to ensure smooth execution of the Solvent Sector Plan.

- 18. Solvent Sector Management Information System (SSMIS). The development of the SSMIS has been basically completed end of July 2002. The SSMIS is now operational and will form an integral part of the overall Management Information System, covering all sector plans approved and being implemented and will offer a useful integrated database.
- 19. Development and Investment of Alternative Solvents Production. China realizes that the most important challenge for a successful and smooth phase out in the solvent sector is the sufficient availability of good quality, workplace safe alternatives at reasonable low price. At present, China imports most of the alternative solvents at a very high price which is a major obstacle to getting the interest of enterprises to participate in phase out activities. Some local enterprises have embarked on the development and production of alternative solvents and equipment. SEPA strongly believes that one important activity in the successful implementation of the Solvent Sector Plan is to assist these local enterprises in the development of these alternative solvents that are identified to be of good potential substitutes and to provide investment in building up their production capacity in order to provide sufficient local supply to current ODS solvent consumers.
- 20. To ensure that non-ODS cleaning technologies are appropriate for various cleaning applications and that cleanliness requirements and production capacity can be maintained, experiments on alternative technologies and production-scale tests have been carried out in LCD and electronic vacuum sectors. Studies on alternative equipment and appraisal on economic impacts of alternative technologies were also carried out.
- 21. A comprehensive strategy on alternative solvents is being developed. Investigations on current situation, the development trend and anticipated demand on solvent alternatives, alternative cleaning technologies and products are being conducted. A comprehensive economic and technical impact analysis will be carried out to assess benefits and costs to the affected industrial sectors and the country as a whole. Based on these findings, a national strategy on alternative development during the compliance period and post-2010 will be finalized.
- 22. To meet the requirement of the development and production of alternative solvents, savings of \$2 million from the bidding process for the 2000 and 2001 ODS Reduction Contracts has been reallocated to the development and production of alternative solvents, including two locally produced alternative solvents, HEP-2 and HT-1. HEP-2 is a chemical mixture, containing 60 70% of n-propyl bromide (nPB). In view of Decision 33/46 taken by the Executive Committee in restricting China to export nPB, in approving China's request to amend the 2000-2001 work programme to reallocate \$2 million savings to the local development and production of alternative solvents, including HEP-2, China has undertaken no actual activity or incurred any expenditure in the development and production of HEP-2 up to now. China has also been advised by UNDP not to use the \$2 million to produce HEP-2.

23. While SEPA is able to control the export of HEP-2 developed and produced with MLF funding, it will not be possible for SEPA to enforce export control of nPB, especially for those producers who have no connection with ODS phase-out or have not received any financial assistance from the MLF. China therefore seeks the guidance on how to proceed as the conditions in ExCom Decision 33/46 cannot be actually implemented by SEPA as they are written. Plan for the development and production of other alternative solvents will proceed and has been included in the recently inaugurated Industrial Park for Implementation of Multilateral Environmental Agreements located in Langfang Economic Development Zone in Hebei Province outside Beijing.

Policy Measures

- 24. Throughout the period of the 2000 2002, China has initiated and effectively implemented policy actions to facilitate ODS phase-out. In order to control ODS production and selling situation, FECO/SEPA, jointly with the Ministry of Information Industry (MII), issued on June 20, 2002 the "Notice of Issuing Execution Methods on Issuing Usage Certificate on Selling ODS Products". The main contents of the Notice covers the following:
 - From July 15, 2002 all those who are producing CFC-113, TCA and CTC for solvent use (ODS) must strictly produce the ODS against the production quota of the year. The ODS producing factories must sell ODS products against the buyer showing their ODS Usage Certificate issued by FECO/SEPA, according to the quantity and solvent indicated. Otherwise, their production quota will be revoked.
 - From July 15, 2002 all ODS consumers must apply to FECO/SEPA's designated unit to obtain the ODS Usage Certificate.
 - According to the operational procedures, the responsibility of issuing the ODS Usage Certificates has been assigned to China Cleaning Engineering Technique Cooperation Association (CCETCA). From August 9, 2002 up to December 2002, CCETCA has issued such ODS Usage Certificates to 199 enterprises at all production levels. In addition, The Notice also requires ODS producing factories, distributors and importers to report to CCETCA information on their ODS production, sales, consumption and name of users.
- 25. SEPA also issued a circular to ban the use of CTC as cleaning solvent, the ban will take effect 1 June 2003. Enterprises, environmental protection and other related units who violate the rules and regulations will be subject to harsh penalties. With this ban, China will therefore be able to meet the 2003 phase out target and will effectively phase out the use of CTC as cleaning solvent by 1 January 2004, as stipulated in the Agreement.

D. 2001 CONSUMPTION TARGETS AND LIMITS

Performance Audits

1. Based on official data and statistics on China chemical production and import & export obtained by SEPA, the total domestic consumption of CFC-113, TCA and CTC in 2001 has met the consumption control targets specified in Table a of the Agreement. Solvent consumption in 2001 is presented in Table 3 below. Consumption was determined in accordance with the Executive Committee approval condition as total annual production plus imports, minus exports. CFC production figures reported are identical to the audited data reported in the CFC Production Sector Plan presented to the Executive Committee by the World Bank. Import and export data are those obtained from official customs records and confirmed by the independent audit by CNAO. Phase-out in 2001 was achieved through the completion of individual investment projects, phase out achieved at enterprises that undertook phase-out at their own cost, and through quota imposed on CFC-113 production. While annual usage of CTC all over China is around 60,000 MT, the consumption of CTC as cleaning solvent in 2001, calculated and verified based on audited data obtained by a second independent audit, as explained in Section C paragraph 9 above, was determined to be 59.6 ODP tonnes, well below the 110 ODP tonnes limit.

Table 3: ODS Solvent Consumption for the Year 2001 unit: ton

Table 5. ODS Softent Consumption for the Tea 2001							
	CFC-	113	TC	A	CT	TOTAL	
	ODS	ODP	ODS	ODP	ODS	ODP	ODP
Consumption Control Target	3,375	2,700	6,130	613	100	110	3,423
Production	4,194.39		974.26				
Import	0		3,602				
Export	32		1				
Raw Material Usage	819.40		-				
Solvent Consumption	3,342.99	2,674.4	4,575.26	457.5	<100	<110	3,241.9

- 2. The Foreign Funds Application Audit Department of the China National Audit Office (CNAO) was commissioned by SEPA and UNDP to verify the 2001 national consumption level in the solvent sector. CNAO confirmed that the 2001 CFC-113 production data and raw material usage was the exact same data that has already been audited and confirmed by the CNAO during its annual performance audit of CFC Production Sector Plan and reported by the World Bank to the ExCom. CNAO also verified the 2001 import and export data for CFC-113, TCA and CTC against records of the Data Centre of the General Administration of the Customs. Based on the ExCom approval condition of "Production" plus "Import" minus "Export" equals Consumption, the 2001 national CFC-113 consumption, the import and export figures of CFC-113 and TCA for 2001 were therefore all confirmed by the independent audit performed by CNAO.
- 3. Subsequent to the CNAO audit, additional performance audit by a commercial auditing company, Beijing Zhong Tian Hua Zheng Certified Public Accountants Co. Ltd., was

commissioned by SEPA and UNDP to verify the 2001 national production level of TCA and CTC consumption as solvents in the 34 enterprises previously identified as CTC consumers in the Solvent Sector Plan. This additional performance audit was carried out in January 2003.

- 4. The audit report of Zhong Tian Hua Zheng Certified Public Accountants Co. Ltd. verified the 2001 TCA national production at 974.26 MT. Together with the verification of the import and export quantities of TCA that were already confirmed in the CNAO independent audit report, the 2001 national TCA consumption was therefore verified as 457.5 ODP tonnes, well below the national consumption limit of 613 ODP tonnes stipulated in the Agreement.
- 5. In addition, the audit report of Zhong Tian Hua Zheng also confirmed the consumption of CTC in the 34 enterprises originally identified in the Solvent Sector Plan at 20.74 MT (22.8 ODP tonnes) for 2001. Since these 34 enterprises accounted for 38.3% of the national consumption, the total national consumption can be extrapolated to be 59.6 ODP tonnes for 2001. As the remaining 61.7% were consumed by small consumers, their consumption could not be increased substantially, it can therefore be quite certain to conclude that the 2001 national consumption of CTC was well below the 110 ODP tonnes limit, as validated in the independent audit.
- 6. The combined results of these two independent performance audits therefore confirmed all the data presented in Table 3 above. China has therefore met the reduction targets on the three chemicals as well as the overall consumption limits for the year 2001.
- 7. SEPA and UNDP will commission independent performance audit on the 2002 consumption targets and limits, to be carried out August-September 2003, for reporting to the 41st Executive Committee Meeting. Data reporting for the 2002 consumption of CFC-113 and CTC as exempted feedstock and process agent use will also be reported at the same ExCom Meeting.
- 8. According to the phase-out schedule, China is required to reduce a total of 508 ODP tonnes in 2002, from the 2001 consumption target of 3,423 ODP tonnes to 2,915 ODP tonnes in 2002. Since the 2001 consumption level had already been reduced to 3,241.9 ODP tonnes, as reflected in Table 3, a reduction of 326.9 ODP tonnes in 2002 is required to achieve the consumption control target. It is expected that China will meet its 2002 phase-out targets and consumption limits.

Annual Management and Financial Audit

9. In addition to the commissioning of performance audits, since 2001, UNDP has included the China Solvent Sector Plan project in its regular annual management and financial audit that was also conducted independently by CNAO. The audit was conducted in conformity with the provisions of the project document, International Generally Accepted Auditing Standards, relevant Chinese auditing standards and the principles and procedures prescribed for the United Nations with respect to funds obtained from or through UNDP. The audit included examination of accounting records, tests of internal control systems and other procedures considered necessary for due performance of this audit. Opinion is expressed by the National Auditors on:

- (a) Financial operations and controls
- (b) Adequacy of the management structure
- (c) Equipment use and control
- (d) Monitoring, evaluation and reporting
- (e) Project execution rate

Data Reporting on Feedstock and Process Agent Use

10. In accordance with paragraph c of the Agreement, a list of name of enterprises and the quantities purchased for the year 2001 of CFC-113 and CTC for exempted feedstock use, for process agent use and for other applications not yet approved as ODS process agent in Decision X/14 of the Parties are presented in Table 4, 5 and 6 below. The consumption reported in these tables are the identical to those reported by the World Bank for the CFC Production Sector, except as noted.

Table 4 Name List and Quantity of CFC-113 & CTC for Feedstock Use in 2001

Table 4 Name List and Quantity of Ci C	CFC-113 for	CTC for Exempted	
Name of Enterprise	Exempted Feedstock	Feedstock Use	
,	Use (MT)	(MT)	
CV 1 2 F. Chamical Industry Co. Ltd.	86 (for CFC-115)		
Changshu 3 F Chemical Industry Co. Ltd.	526 (for CFC-113a)		
Zi '' Ci ' II I to Dominio Instituto	207 (for CFC-114 &		
Zhejiang Chemical Industry Research Institute	115)		
Juhua Fluoro-Chemical Co. Ltd.		16,428.9	
Dongyang Chemical Plant		3,010.5	
Linhai Limin Chemical Plant		1,970.4	
Guangdong Xiangsheng Chemical Co. Ltd.		1,507.8	
Jiangsu Meilan Electro-Chemical Plant		3,773.7	
Jiangsu Changsu 3 F Refrigerant Co. Ltd.		17,417	
Total	819	44,108.3	
7	12.5	60,000	
Limit in Agreement	(10 ODP MT)	(66,000 ODP MT)	

- 11. It is noted that, as reported in the World Bank 2001 Verification Report of the CFC Production Phase-out Programme, CFC-113 production by Jiangsu Changsu 3F Refrigerant Co. Ltd. of 4,194.4 MT, included 819.4 MT used in chemical conversion in the following applications:
 - Production of CFC-115 by Jiangsu Changsu 3F
 - Production of non-CFC products within the enterprise
 - Production of CFC-114/115 by Zhejiang Chemical
 - Production of Zhejiang Chemical other non-CFC products
- 12. All of the above-mentioned applications have been verified, therefore the report concluded that the total CFC-113 production was 3,375 MT as ODS. The 819.4 MT CFC-113 was chemically converted to CFC-114/115, CTFE or CFC-113a, and is not counted as feedstock.

Table 5 Name List and Quantity of CTC for Process Agent Use in 2001

Name of Enterprise	Quantity (MT)
Shenyang Chemical Co. Ltd.	74.62
Shanghai Chlor Alkali Chemical Co. Ltd.	147.45
Shangyu Qiming Chemical Co. Ltd.	151.7
Jiangyin Fasten Co. Ltd.	150.44
Shouchang Chemical Ltd.	56
Sichuan Longchang Chemical Co. Ltd.	126
Zhejiang Longyou Lude Pesticide Chemical Co. Ltd.	41.48
Wuxi Chemical Group Co. Ltd.	122.97
Huanghua City Jinhua Chemicals Co. Ltd.	289.7
Henan Puyang Oilfield CR Factory	140
Guangzhou Haotian Chemical Co. Ltd.	173.91
Zhejiang Xinan Chemicals Group Co. Ltd.	173.29
Luzhou Longmatanqu Hongyuan Chemicals Factory	16.09
Dalian City Jianxi Chemical Industrial Head Co.	332.3
Harbin Yibin Chemicals Industrial Co. Ltd.	37.55
Jilin Chemical Industrial Company	1,063.17
Zhejiang Huahai Pharmaceuticals	25.92
Total	3,122.59
Limit as per Agreement	5,000 (5,500 ODP MT)

Table 6 Plants using CTC in other applications not yet approved as ODS process agent in 2001

Name of Plants	Quantity (MT)
Guangdong Yangchun Gangli Chemical Co. Ltd.	435
Guangzhou Jingzhujiang Chemical Co. Ltd.	733
Suzhou Xianke Chemical Co. Ltd.	178
Jiangsu Agro-Chemical Co. Ltd.	0
Jiangyin 2 nd Pesticide Co. Ltd.	0
Shanghai Dongfeng Pesticide Factory	15.3
Hainan Pesticide Factory	0
Jiangsu Anbang Electrochemicalo Co. Ltd.	270
Jiangsu Dongtai Agro-Chemical Factory	0
Jiangsu Chanzhou Pesticide Factory	509.3
Chongqing Changfeng Chemical Factory	125
Jiangsu Wuxian Pesticide Factory	100
Nanjing 1 st Pesticide Factory (Red Sun Group)	76.7
Jiangsu Pesticide Research Institute, Nanjing Pesticide Factory	30
Jiangsu Yangnong Chemical Group Co. Ltd.	80
Chanzhou Xinhua Industry General Co.	0
Sharonda (Jingzhou) Chemical Co. Ltd.	0
Hunan Linxiang Amino-Chemical Factory	165
Shandong Huayang Agro-Chemical Group Co. Ltd.	115
Hunan Haili Chemical Co. Ltd.	366.4
Jingjiang Pesticide Factory	0
Jingjiang City Jinguo Agro-Chemical Co. Ltd.	1.5
Liyang City Guanghua Chemical Industry Co. Ltd.	169.2
Liyang City Xinhai Chemistry Plant	117.9
Shanghai Fengjiang White Ant Prevention and Cure Materials Co. ltd.	16
Shanghai Qiming Chemical Industry Co. Ltd.	0
Jiangsu Chemical Industry Pesticide Group Co. Ltd.	493
Changzhou Yekang Chemical Products Co. Ltd.	45
Suzhou Jiangfeng White Ant Prevention and Cure Materials Co. Ltd.	19
Jintan City Shuibei White Ant Prevention and Cure Materials Factory	13
Total	4,073.3

13. The name list of enterprises and quantities of CTC consumed as other application shown in Table 6 above reflected the results of an actual survey undertaken by SEPA in February – May

- 2003. It is different from the 6,547 MT reported in Table 1 of the World Bank's report entitled "China: Process Agents Sector Plan Compliance Scenario," the 6,547 MT was only an estimated figure.
- 14. The total quantities of 51,304.2 MT (56,434.6 ODP tonnes) of CTC for feedstock, process agent and other applications not yet approved as ODS process agent uses in 2001 are below the 65,000 MT (71,500 ODP tonnes) limits, as specified in paragraph c of the Agreement.

Independent Technical Audit by UNDP

- 15. In addition to the performance and financial audits undertaken by China National Audit Office and Zhong Tian Hua Zheng Certified Public Accountants Co. Ltd., UNDP also commissioned international and national solvent sector experts to carry out independent technical audits in August 2002 and February 2003 to 14 of the 16 recipient enterprises who had their equipment installed, commissioned and eliminated the consumption of ODS solvents. The technical audits reviewed the ODS cleaning applications, the quantity of ODS consumption, the alternative solvents, the new non-ODS cleaning equipment installed and commissioned, and the fate of the baseline equipment.
- 16. The technical audit concluded that the projects showed a high quality of engineering effort, good competency in designing the projects, strong skills in the manufacturing and installation of the cleaning equipment and process and in general good understanding of the issues associated with the operation of the new processes. The enterprises pointed out the need for the new solvent supplier (locally produced HEP-2) to supply better information on the use and disposal of this nPB-containing product.
- 17. The equipment suppliers are making a strong effort to meet the specifications, and that there is sufficient engineering support to assure a relatively smooth start-up. The factories that are recipients of these sub-projects are committed to making the phase-out successful in their particular site, and they all have worked well with the equipment suppliers to adjust the basic specifications and include some very good ideas to improve performance and safety in loading and operating the equipment.
- 18. In general, the alternative solvent works very well and the equipment all work acceptably. Cleanliness requirements, based on visual examination, were equal or better than the system that was replaced. While the baseline equipment has not been destroyed, but in storage waiting for SEPA and UNDP officials to witness the destruction, they have now operating with non-ODS cleaning application, ODS consumption has been phased out.

PART II 2003 ANNUAL IMPLEMENTING PROGRAMME

Phase out Objectives

- 1. The phase-out target of the 2003 Annual Implementation Programme is to reduce national solvents consumption from the maximum level of 2,335 ODP tonnes in 2003 to 1,602 ODP tonnes in 2004. Individually, CFC-113 will be reduced by 600 ODP tonnes, from 1,700 ODP tonnes to 1,100 ODP tonnes, TCA by 78 ODP tonnes, from 580 ODP tonnes to 502 ODP tonnes, with CTC totally phased out by 1 January 2004.
- 2. China is requesting the release of the fourth tranche in the amount of US\$5,755,000 and the corresponding support fees for the 2003 Annual Implementation Programme to undertake the following activities:
 - a. Through direct contact, identify and solicit enterprise participation in ODS Reduction Contract and experimental Voucher System to realize the phase out at the end of 2004:
 - b. Through retroactive reimbursement mechanism, identify and record phase out achieved by enterprises that initiated phase-out activities at their own costs;
 - c. Further strengthening and optimization of the Alternative Technology Support System (ATSS) and implementation mechanism to bring project completion back to the original target of 12-18 month;
 - d. Continue technical assistance and strengthen training to potential and successful enterprises proper financial and administrative management; and
 - e. Continue formulation of related policies to enforce and sustain phase-out.
- 3. \$5,155,000 will be used to carry out enterprise-level phase-out activities and \$600,000 will be used to conduct technical assistance activities and formulate policy measures.

Enterprise-Level Phase-out Activities

4. Enterprise level activities will continue to focus on the challenge of identifying, funding and implementing phase-out activities with large and medium size enterprises through ODS Reduction Contracts and small size projects with small solvent consuming enterprises through Voucher System, or through reimbursement mechanism to phase out sufficient quantity of consumption to achieve reduction at the end of 2004. Project identification will be carried out in several ways, with close cooperation of provincial and city level industrial associations, equipment manufacturers and solvent dealers. Principal focus will be the use of local resources including the Solvent Special Working Group (SWG), Domestic Implementing Agent (DIA), Ministry of Information Industry (MII) and ATSS agencies. As indicated in the 2002 Progress Report, it has been increasing difficult to attract enterprises to participate in the phase out activities through the bidding process, special efforts will now be focused on direct contact and negotiation with the original solvent consumers identified in the surveys during the preparation of the Sector Phase out Plan, instead of relying on the bidding process.

- 5. The following activities will be carried out in 2003:
 - (a) Complete implementation of the two enterprises under the 2000 ODS Reduction Contracts.
 - (b) Complete implementation of 21 ODS Reduction Contracts signed in 2001 and continue implementation of the 32 ODS Reduction Contracts signed in December 2002, to contribute to achieving the 2003 and 2004 consumption limits of CFC-113, TCA and CTC;
 - (c) Through direct contact and negotiation with enterprises, or reimbursement mechanism, sign up about 20 40 ODS Reduction Contracts and issue vouchers to about 100 SMEs so as to achieve reduction at the end of 2004, meeting the consumption limit for 2004.
 - (d) Identify and record phase out achieved or to be achieved by enterprises that initiated phase-out activities at their own costs, and provide retroactive reimbursement to those eligible for funding.
- 6. Projects to be commenced in 2003 will require that ODS Reduction Contracts be signed latest by August 2003 and vouchers be issued by October 2003. Project Management Office (PMO) of SEPA will undertake planning action to identify enterprise participation and negotiate these contracts and vouchers starting second quarter 2003.
- 7. While SEPA and UNDP have expressed concerns that phase-out activities in the solvent sector may start to face difficulty in attracting sufficient enterprises to participate in the phase-out activity, SEPA and UNDP will intensify efforts in the identification of enterprises through industrial associations, regional and provincial institutions, and through promotional and public awareness events to attract potential enterprises. Direct contact and negotiation will also be carried out with enterprises originally identified in the surveys during the preparation of the Sector Plan, leading to their participation in the phase-out activities, rather than relying on the bidding process. UNDP has decided to outpost the staff responsible for the management of the China Solvent Sector Plan to China, to achieve closer cooperation and collaboration with SEPA In addition, China has also promulgated regulation of issuing ODS Solvent Consuming Certificate to control ODS consumption from both ODS supply and demand sources and circular to ban CTC used as cleaning solvent effective 1 June 2003.
- 8. Furthermore, since the inception of the Solvent Sector Plan, and in close coordination with the CFC Production Sector Plan, China has taken step to impose quota on the production of CFC-113 to the control target level. All these steps and actions will therefore ensure that China will be able to meet its annual control targets as stipulated in the Agreement.

Policy Actions

- 9. Starting 2003, SEPA will limit production of CFC-113 and CTC to the maximum level just sufficient to cover the limits for solvent, feedstock and process agent uses. For TCA, the quantity of production and import will also be controlled.
- 10. The following activities will also be undertaken to establish relevant policies and relevant solvent standards:
 - Promulgate the Ban on Usage of CTC as cleaning solvent, to take effect mid 2003.
 - Promulgate relevant sub-sector policies for stopping OD solvent usage.
 - Continue to establish relevant solvent standards and technical norms.
- 11. Together with enterprise level phase-out activities, the necessary technical assistance activities and the policy framework, the combined actions will facilitate the smooth and orderly phase-out of solvent consumption to achieve the phase-out targets stipulated in the Agreement. It is note that the consumption of CTC as cleaning solvent will be completely phased out by 2004.

Technical Assistance (TA) Activities

- 12. The objectives of the TA activities will be to:
 - strengthen the overall institutional framework;
 - improve the management, monitoring and evaluation capabilities of participating institutions:
 - through training, strengthen enterprise managers and technical personnel on effective financial and administrative management;
 - training of decision-makers at various level; and
 - strengthen the Alternative Technology Support System
 - formulation of Standards and Technical Specifications
 - -Promote public awareness campaigns
- 13. The main TA activities to be carried out in 2003 include:
 - Start integration of the Solvent Sector Management Information System (SSMIS) for ODS phase out in the solvent sector with the ODS MIS System of FECO/SEPA to form a comprehensive and coordinated database of ODS phase out in all sectors;
 - Public Awareness Campaigns to introduce and publicize country-wide the Solvent Sector Plan and ODS solvent phase-out schedule in newspaper and other media to attract participation in phase-out activities;
 - Training of personnel involved in the implementation of phase-out activities for 1) environmental staff and decision makers to increase their recognition and management capacity; 2) industrial managers and technicians to enhance their understanding of

alternative technology and to master how to apply the new technology; 3) ODS and substitute solvent dealers to deliver information on updated non-ODS solvent technology to their users; 4) ODS solvent consumers on how to participate in activities of the ODS Reduction Contract and voucher system, to obtain funding to undertake timely phase-out activities, and to exercise effective financial and administrative management of phase-out activities and MLF grants, and 5) SWG and DIA on effective supervision, monitoring and timely implementation of phase-out activities. The training will therefore address the administrative issues raised in the CNAO audit report on appropriate use of MLF fund and proper management of phase-out projects;

- Strengthen the Alternative Technology Support System (ATSS) to better resolve the alternative technology issues and to provide sufficient support on the selection of appropriate alternative technology options and its subsequent implementation;
- To address the demand of alternative substitute after 2010. Essential and necessary usage in the solvent sector will be investigated.
- Establish standards and technical norms: Terms of Reference will be finalized by the end of May 2003. As this work involves many areas, in 2003, it will continue to carry on the work and scope initiated in the First Annual Implementation Programme and to expand to other areas;
- Recruit necessary national and international consultants to provide technical services for training and technical conversion guidance to ODS solvent users, SWG, DIA and procurement agency.
- Support the usage of Alternative Solvents. In order to ensure the result of the investment projects and avoid the enterprises to revert to ODS use after completion of project, to encourage enterprises to choose ODS substitute solvents and to promote the use of ODS substitute solvent; it would be really important to make available relevant ODS substitute solvent at acceptable market price and to ensure a certain and larger market share of the substitutes for the suppliers/distributors of alternative solvents. As the price of the substitutes are relatively high, it is necessary to use the \$2 million savings to compensate enterprises with IOC, or through a subsidize scheme, to bring the price of alternative solvents to an acceptable level.

Table 7 Consumption Targets under the 2003 Annual Implementation Programme

Targets				
Indicators		2002 (Preceding Year) ODP Tonnes	2003 (Year of Programme) ODP Tonnes	Reduction ODP Tonnes
Consumption	CFC-113	2,200	1,700	500
	TCA	605	580	25
<u></u>	СТС	110	55	55
	Total	2,915	2,335	580

Table 8 Enterprise Level Activities

	E	NTERPRISE-LI	EVEL ACTIVITI	ES	
	Estimated MLF US\$ million requested	No. of enterprises targeted	Phased Out in 2003 (ODP Tonnes)	Key Actions Required	Key Dates
Complete implementation of two 2000 ODS Reduction Contracts	N/a	2	38.4 (CFC-113) 0.4 (TCA)	Project completion and destruction of baseline equipment	June – September 2003
Complete 2001 ODS Reduction Contracts	N/a	21	541.6 (CFC-113) 10.6 (TCA)	Project completion and destruction of baseline equipment	June-Sept. 2003
Implementation of 2002 ODS Reduction Contracts		32	n/a (phase out to be achieved in 2004)	2. Equipment procurement, installation, commissioning and destruction of baseline equipment	March 2003 – June 2004
3. Conversion of ODS Consuming Enterprises under 2003 Annual Implementation Programme		L/M-size: 20 - 40		1. Sign 20 – 40 ODS Reduction Contracts, reimbursement mechanism, and self phase out activities	Contracts signed by the end of August 2003;
	\$1.455 CTC \$0.200	Small-size: 100		2. Issuing vouchers to about 100 small users	Vouchers issued by end of October 2003.

Table 9 Government Action

POLICY INITIATIVES						
Activities	Actions Required	Key Dates				
Final Notice on banning use of CTC as cleaning solvent	- Final Notice on banning use of CTC as cleaning solvent	Ban to take effect June 2003.				
2. Prepare and draft Notice on self-phase out of OD solvent for enterprises not cover by MLF grant	- Consult and discuss with relevant industrial associations; - Study and determine the feasibility of promulgation and implementation of such policies; - Prepare and draft a policy.	- By beginning of 2003; - Second half of 2003.				
3. Limit production quantity of CFC-113, TCA and CTC up to the total limit for solvent, feedstock and process agent use	Production quota issued to match the quantity required for solvent, feedstock and process agent use, as stipulated in Agreement	Finalized early 2003 to take effect mid 2003				
4. Control quantity of TCA imported for solvent use	Import quota issued by Import/Export Office	Effective Mid 2003				

Table 10 Technical Assistance Activities

		TECHNICAL A	ASSISTANCE ACTIVITIES	
	Activities	MLF Funding Requested (US\$1,000)	Actions Required	Key Dates
a.	Public Awareness	200	Promote public awareness of enterprises on ODS solvent sector phase-out activities 1. International Forum and Exhibition on Solvent 2. Web-site construction 3. Journal and Newsletter 4. Newspaper 5."9" 16" activities	From beginning of 2003
b.	Training	120	1. Training Material Compilation for training mission 2. Training Workshop for technical personnel 3. Training Strategy for Local Authorities (by UNEP) 4. Training on Voucher System	1. Start no later than April 2003 2. Start no later than October 2003
c. ATSS	Strengthening	50	Conduct training and exchanges	June 2003
d. stand	Establishment of ards and technical s	100	By Qualified Institutions	Start in January 2003
e. Interr	National & national Consultants	80		January – December 2003
f.	Other TA	50	Investigation for necessary usage	Start no later than June 2003
Total	2003 TA Activities	600		

Table 11. Implementation Programme – Performance Indicators (January 1, 2003 – December 31, 2003)

				ber 31, 2003)			
		Solvent P	hase-out T				
	Start of	Reduction	End of	Indicators to be reported on in semi-annual progress			
Solvent sub-sector	programme	Target	programme				
	(ODP MT)	(ODP MT)	(ODP MT)	Verified in annual performance audits			
CFC-113 Imports/exports	0	0	0	Ban on exports and imports in 2003			
Phase-out achieved:		20.4		From two 2000 ODS Reduction Contracts			
CFC-113		38.4 541.6		From completion of 2001 ODS Reduction Contracts			
	2,200	580					
	2,200	200	1,020				
TCA		0.4		From two 2000 ODS Reduction Contracts			
		10.6		From completion of 2001 ODS Reduction Contracts			
		<u>14.0</u>		From retroactive reimbursement and policy measures			
	605	25	580				
CTC		55		From retroactive reimbursement and policy measures			
СТС	110	<u>55</u> 55	55				
Phase-out targets:	110						
CFC-113	2,200	500	1,700	Consumption levels will be dictated by domestic			
	,			production. Reduction by end 2003 to be achieved			
TCA	605	25	580	by ODS Reduction Contracts, vouchers and			
				reimbursement mechanism in 2003			
CTC	110						
2003 ODS Reduction		L/M 20-40		Number of contract signed.			
Contracts, Voucher Redeemed and Retroactive		SMEs 100		Number of voucher issued.			
Reimbursement.		SIVILS 100		, and a volume of volume of the control of the cont			
Support on usage of alternative		<u> </u>		Compensation or subsidy on alternative solvents			
solvents				identified and agreements signed			
		D. II	. 1.70 A. T '-				
	,		nd TA Ini				
Initiatives				ted on in semi-annual progress reports			
1. Direct Negotiation with			ined to preparent	are project proposals for 2003 contracts			
enterprise and Experimental Voucher System			System comp				
Voucher System		issued to SM		icted			
2. Public Awareness				phase-out schedule in newspapers.			
2. 1 40.00 11.00 00.00				ucher system through relevant media.			
3. Training	Provide per	sonal trainin	g courses to	ODS users, EPBs and local line ministries			
4. Final Notice on banning use		ive 1 June 2					
of CTC as cleaning solvent	- Promotion	- Promotional campaigns on the ban;					
}	F .		ic Bureaus a	nd EPBs engaged in promotion and support to CTC			
	solvent users						
5. Strengthen ATSS				improved, progress reports prepared			
6. Establishment of standards	Contracts is	sued, progre	ess reports pr	epared, draft standards finalized			
and technical norms	<u> 1 </u>	<u></u>					

Table 12 Implementation Programme (2000 - 2001) Performance Indicators

Performance Indicators					
	<u>-</u>	Solv	vent Phase o	out Targets	
Solvent Sub-sector	Start of programme (MT)	Reduction Target (MT)	End of programme (MT)	Indicators to be reported on in Semi-Annual Progress Reports. Verified in Annual Performance Audits	Achievement
CFC-113 Imports / Exports	149	0	0	Ban on exports and imports effective January 1, 2001	Promulgated 18 January 2001, effective 1 February 2001
Domestic Consumption and Phase out Target	4,441	466 (plus 600 from on- going MLF projects)	3,375 (in 2001) 2750 (in 2002)	Consumption levels (production plus imports minus exports)	- Overall 2000 and 2001 Consumption and Phase out Targets on CFC-113, TCA and CTC met - ODS Reduction Contracts
TCA Supplement	-	>100	-	Included in ODS reduction contracts	signed 2000 and 2001 to meet 2002 and 2003 Phase Out Targets
Number of ODS Reduction Contracts (inclusive of TCA supplement)		L/M 20-40 S 100 (2001)		Number of contract signed (sum of ODS reduction in the contracts) Progress under contracts	- 16 ODS Reduction Contracts signed in 2000 to phase out 473 MT of CFC- 113, 101 MT of TCA and 7.6 MT of CTC;
Voucher Redeem				Number of voucher redeemed	- 21 ODS Reduction Contracts signed in 2001 to phase out 677 MT of CFC- 113, 105.9 Mt of TCA
Policy and TA Init	iatives				
Initiatives	Indicators to be reported on in semi-annual progress reports				
1. Bidding System	Bidding system's operating procedures finalized. Winning enterprises for 2000 –2001 selected. Enterprises trained for bid preparation for 2000 and 2001bidding.			 Project Implementation Manual finalized June 2000 and bidding took place in September 2000 and April 2001. 30 and 23 enterprises selected to participate in 2000 and 2001 phase out activities respectively. Training took place prior to each year's bidding. Performance and financial audits carried out in Aug. 2002 	
2. Public Awareness	Introduce Solvent Sector Plan and phase out schedule on two newspapers Invite ODS solvent users to take part in the reduction bidding and promote the enterprises to participate the phase out actions			 Mass media promotions carried out in August 2000. Periodic articles published in electronic sector's regular publications and countrywide newspapers and magazines. 30 and 23 enterprises were invited to participate in the 2000 and 2001 bidding. 	
3. Training	Provide perso	onal training co		Trainings and seminars on ODS phase out conducted during 2000 and 2001.	
4. Notice on banning newly- built enterprise which produces o uses ODS solvent	Promotional Local Electro r engaged in o	campaigns on to onic Bureaus are verseeing ban e	he ban; nd EPBs	Second Export Banning List of ODS promulgated on 18 January 2001 and became formally effective 1 February 2001.	
5. Developing ATSS	Contracts issued, progress reports			ATSS composed of national expert group, relevant industrial associations, three technical support centers, alternative solvent or equipment dealers or manufacturers	