NATIONS UNIES **EP**

Programme des Nations Unies pour l'environnement

Distr.
GENERALE

UNEP/OzL.Pro/ExCom/48/28
6 mars 2006

FRANÇAIS
ORIGINAL: ANGLAIS

COMITE EXECUTIF
DU FONDS MULTILATERAL AUX FINS
D'APPLICATION DU PROTOCOLE DE MONTREAL
Quarante-huitième réunion
Montréal, 3 – 7 avril 2006

PROPOSITIONS DE PROJETS : CHINE

Le présent document comporte les observations et les recommandations du Secrétariat du Fonds sur les propositions de projets suivantes :

Fumigènes

• Plan du secteur du tabac visant l'élimination du CFC-11 : programme de travail 2006	ONUDI

Agents de transformation

• Élimination de la production et de la consommation du CTC utilisé comme agent de transformation et pour d'autres usages non déterminés (Phase I) : programme annuel 2006	Banque mondiale
• Élimination de la production et de la consommation du CTC utilisé comme agent de transformation et pour d'autres usages non déterminés (Phase II) : programme annuel 2006	Banque mondiale

Production

• Plan sectoriel visant l'élimination de la production de CFC : programme annuel 2006	Banque mondiale

FICHE D'ÉVALUATION DE PROJET (PROJETS PLURIANNUELS)
CHINE

TITRE DU PROJET	AGENCE BILATERALE/AGENCE D'EXÉCUTION
Plan du secteur du tabac visant l'élimination du CFC-11 : programme annuel 2006 - 2007	ONUDI

ORGANISME NATIONAL DE COORDINATION :	Administration nationale de protection de l'environnement (SEPA - State Environmental Protection Agency)

DERNIERES DONNEES DECLAREES SUR LA CONSOMMATION A ELIMINER GRACE AU PROJET
A : DONNEES RELATIVES A L'ARTICLE 7 (TONNES PAO, 2004, EN DATE DE FÉVRIER 2006)

Annexe A, Groupe I - CFC	17 902		

B : DONNÉES SECTORIELLES DU PROGRAMME DE PAYS (TONNES PAO, 2004, EN DATE DE FÉVRIER 2006)

SAO	Mousse	Frigorigènes	Aérosol	SAO	Solvants	Agents de transformation	Autres
				CFC-11			463,05

Consommation restante de CFC admissible au financement (tonnes PAO)	0

PLAN D'ACTIVITÉS DE L'ANNÉE EN COURS : Financement total : 1 613 500 $US - Élimination : 148,6 tonnes PAO.

DONNÉES RELATIVES AU PROJET		2001	2002	2003	2004	2005	**2006**	2007	Total
CFC-11 (tonnes PAO)	Consommation maximum pour l'année	1 000	880	700	500	300	**150**	0	
	Élimination annuelle ciblée	90	120	180	200	200	**150**	150	
CONSOMMATION TOTALE DE SAO À ÉLIMINER									
Consommation totale de SAO à introduire (HCFC)									
Coût total du projet ($US) **:**		2 000 000	2 000 000	2 000 000	1 800 000	1 700 000	**1 500 000**	0	**11 000 000**
Total des coûts d'appui ($US) **:**		180 000	180 000	150 000	135 000	127 500	**112 500**		**885 000**
COÛT TOTAL POUR LE FONDS MULTILATÉRAL ($US)		2 180 000	2 180 000	2 150 000	1 935 000	1 827 500	**1 612 500**		11 885 000
Rapport coût-efficacité final du projet ($US /kg)									9,00

RECOMMANDATION DU SECRÉTARIAT	Approbation du financement pour la sixième tranche (2006) (comme ci-dessus)

DESCRIPTION DU PROJET

1. Au nom du gouvernement de la Chine, l'ONUDI a présenté pour examen par le Comité exécutif à sa 48e réunion un rapport périodique sur la mise en oeuvre du programme de travail de 2005 visant l'élimination du CFC-11 dans le secteur du tabac (plan du secteur du tabac), en même temps qu'une demande de 1,5 million $US $ pour la mise en oeuvre du programme de travail annuel pour 2006 et 2007. Ce montant représentera le décaissement final du Fonds multilatéral en ce qui a trait à l'élimination totale du CFC-11 utilisé pour l'expansion du tabac en feuilles en Chine.

Données générales

2. À sa 32e réunion, le Comité exécutif a approuvé un accord avec le gouvernement de la Chine pour la mise en oeuvre du plan du secteur du tabac, afin d'éliminer 1 090 tonnes de PAO de CFC-11 entre 2001 et 2007. À la même réunion, le Comité exécutif a attribué 2 millions $US à l'ONUDI pour la mise en oeuvre du programme de travail de 2001.

3. Aux 36e, 39e, 42e et 45e réunions, le Comité exécutif a approuvé, pour le plan du secteur du tabac, des tranches de financement totalisant 7,5 millions $US.

Rapport périodique sur la mise en oeuvre du programme de travail de 2005

4. Au début de 2005, le contingent de consommation de CFC-11 a été déterminé pour chaque entreprise, en fonction du contingent de consommation total de 2005 pour le secteur du tabac et du niveau de production réelle de chaque entreprise. On a demandé à toutes les 17 entreprises d'expansion du tabac admissibles de faire part de leur intérêt à éliminer leur contingent de CFC-11 pour 2005 par le truchement d'un système public d'appel d'offres. Toutefois, en date de mars 2005, aucune soumission n'avait encore été reçue d'aucune des 17 entreprises, car elles préféraient recevoir un soutien financier avant la fin de 2007, lorsque la consommation de CFC-11 aurait été éliminée dans ce secteur. Dans ces circonstances, la State Tobacco Monopoly Administration a annulé le processus d'appel d'offres et décidé de fournir des incitatifs aux entreprises admissibles qui consentaient à démanteler leurs équipements d'expansion fonctionnant avec du CFC, qui étaient situées près d'autres entreprises qui pourraient leur fournir du tabac expansé, et qui avaient les moyens financiers pour d'autres investissements.

5. Le Comité a consenti le programme d'indemnisation aux neuf entreprises qui démantèleront douze unités d'expansion fonctionnant avec du CFC. Il a été convenu que les équipements cesseraient immédiatement de fonctionner et seraient démantelés avant le 31 décembre 2005. Par la suite, en avril 2005, le State Tobacco Monopoly Administration et l'Administration nationale de protection de l'environnement (la State Environmental Protection Agency) ont examiné les soumissions et sélectionné les neuf entreprises indiquées au tableau ci-dessous pour le programme de démantèlement de leur matériel d'expansion à base de CFC-11. Une autre unité avec CFC-11 installée après le 25 juillet 1995 (Mianyang Cigarette Factory) a aussi été démantelée, sous la supervision du gouvernement de la Chine, sans indemnisation du Fonds multilatéral.

N° du plan sectoriel	Nom de l'entreprise	Unités d'expansion	Date d'installation
8	Guangzhou General Cigarette Factory (Shaoguan)	2	Déc. 91 et sept. 94
9	Guangzhou General Cigarette Factory (Nanxiong)	1	Juin 95
14	Guangzhou General Cigarette Factory (Nanhai)	1	Mars 92
12	Hainan Hongta Cigarette Co., Ltd.	1	Sept. 92
54	Yanji Cigarette Factory	1	Janv. 92
36	Shijiazhuang Cigarette Factory	1	Avril 92
2	Xuchang Cigarette General Factory (Zhumadian)	1	Déc. 92
57	Xiamen Cigarette Factory (Huamei)	1	Mars 95
37	Zhangjiakou Cigarette Factory	1	Juin 91
51	Nanchang Cigarette Factory	1	Oct. 92
5	Zhengzhou Cigarette General Factory (Luohe)	1	Oct. 94
Total		**12**	

6. Fin décembre 2005, et conformément à la consommation de CFC-11 déclarée par les entreprises, la consommation totale de CFC-11 dans ce secteur a été de 128 tonnes de PAO.

7. Les activités d'assistance technique suivantes ont été mises en oeuvre en 2005 et elles devraient être terminées en 2006 :

a) Étude des effets des différents types de feuilles de tabac sur la qualité du tabac expansé sans CFC-11; et

b) Étude sur l'incidence des techniques d'expansion au CO_2 sur les éléments chimiques volatils du tabac.

Programme de travail annuel pour 2006 et 2007

8. La principale activité à être mise en oeuvre dans le programme de travail 2006-2007 est l'attribution de nouveaux contingents de CFC-11 par le gouvernement de la Chine afin de réduire le CFC-11 de 300 tonnes de PAO, ce qui entraînera l'élimination totale du CFC-11 utilisé dans le secteur du tabac. Les six entreprises admissibles restantes utilisant du matériel d'expansion à base de CFC seront invitées à soumettre leurs contingents par le truchement d'un mécanisme public d'appel d'offres. D'autres équipements d'expansion de cinq entreprises admissibles (établie après le 25 juillet 1995) seront aussi démantelés sans l'assistance du Fonds multilatéral. L'appel d'offres sera ouvert en avril 2006.

9. Conformément au plan du secteur du tabac, l'ONUDI, au nom du gouvernement de la Chine, demande 1 500 000 $US pour la mise en oeuvre du programme de travail 2006-2007, plus 112 500 $US en coûts d'appui d'agence.

10. En 2007, la State Environmental Protection Agency et l'ONUDI présenteront des rapports détaillés de toutes les activités mises en oeuvre et les résultats obtenus pendant la mise en oeuvre du plan du secteur du tabac (2001 à 2007).

OBSERVATIONS ET RECOMMANDATION DU SECRÉTARIAT

OBSERVATIONS

11. Le Secrétariat a examiné le rapport périodique sur la mise en oeuvre du programme de travail de 2005 présenté par l'ONUDI, basé sur l'Accord entre le gouvernement de la Chine et le Comité exécutif, et sur la stratégie d'élimination du secteur du tabac. Le Secrétariat a pris note que, en raison des activités mises en oeuvre en 2005, la consommation de CFC-11 pour l'expansion du tabac a été de 172 tonnes de PAO inférieure au niveau de consommation de CFC-11 établi dans le plan du secteur du tabac.

12. Le rapport de l'ONUDI indique que les représentants du groupe de travail spécial pour le plan du secteur du tabac, la Tobacco Monopoly Administration provinciale, le bureau local de la protection de l'environnement, et des études de notaire locales ont surveillé et supervisé le démantèlement des équipements d'expansion avec CFC. La procédure a été entièrement enregistrée (bandes vidéo et photographies), et les études de notaire locales ont émis les actes notariés pertinents (tous ces dossiers ont été tenus par le groupe de travail spécial pour le plan du secteur du tabac).

13. En ce qui a trait au programme de travail 2006-2007, le Secrétariat prend note que l'objectif d'élimination fixé de 300 tonnes de PAO de CFC-11 est conforme à l'Accord. Selon le rapport périodique pour 2005, la consommation restante de CFC-11 dans le secteur du tabac n'est que de 128 tonnes de PAO, ce qui est inférieur à la consommation proposée pour 2006 (150 tonnes PAO). Dans ces circonstances, le Secrétariat a demandé l'avis de l'ONUDI quant à la faisabilité d'achever le projet un an plus tôt que la date proposée dans le plan initial. L'ONUDI a indiqué que le gouvernement de la Chine et l'ONUDI déploieraient tous les efforts possibles afin d'achever le projet plus tôt, possiblement d'ici juin 2007.

14. À la demande du Secrétariat, l'ONUDI a indiqué que les entreprises de tabac avaient investi environ 120 millions $US pour remplacer des équipements d'expansion avec CFC par d'autres technologies sans CFC.

RECOMMANDATION

15. Le Secrétariat du Fonds recommande l'approbation globale de la sixième tranche du projet et les coûts d'appui associés au niveau de financement indiqué au tableau ci-dessous, en étant entendu que l'ONUDI présente un rapport périodique sur la mise en oeuvre du plan de travail 2006 à la première réunion du Comité exécutif en 2007 et un rapport d'achèvement de projet pour l'ensemble du plan du secteur du tabac à la première réunion du Comité exécutif en 2008.

	Titre du projet	Financement du projet ($ US)	Coûts d'appui ($ US)	Agence d'exécution
a)	Plan du secteur du tabac visant l'élimination du CFC-11 : programme annuel 2006 - 2007	1 500 000	112 500	ONUDI

ÉLIMINATION DE LA PRODUCTION ET DE LA CONSOMMATION DE CTC UTILISÉ COMME AGENT DE TRANSFORMATION ET POUR D'AUTRES USAGES NON DÉTERMINÉS (PHASE I) : PROGRAMME ANNUEL 2006 ET VÉRIFICATION DU PROGRAMME DE TRAVAIL ANNUEL 2005

Introduction

16. À sa 38e réunion en novembre 2002, le Comité exécutif a approuvé en principe un montant de 65 millions $US pour l'Accord avec la République populaire de Chine visant l'élimination de la production et de la consommation de CTC et de la consommation de CFC-113 comme agents de transformation (phase I), et a décaissé la première tranche de 2 millions $US à la réunion afin d'amorcer la mise en oeuvre. Par la suite, à ses 39e, 43e et 46e réunions, le Comité exécutif a approuvé les programmes annuels de 2003 à 2005, aux niveaux de financement de 20 millions $US, 16 millions $US et 2 millions $US, respectivement.

17. La Banque mondiale a présenté le programme annuel 2006 à la 47e réunion, en étant entendu que le financement pour 2006 serait décaissé seulement lorsque la vérification des résultats de la mise en oeuvre du programme annuel 2005 serait disponible. Le Comité exécutif a donc approuvé le programme annuel 2006 à la 47e réunion mais retenu les fonds jusqu'à ce que la Banque mondiale ait présenté la vérification des résultats de la mise en oeuvre de 2005 (Décision 47/27).

18. La Banque mondiale a présenté à cette réunion la vérification achevée de la production et de la consommation de CTC et de la consommation de CFC-113 pour 2005 (jointe), et a demandé le décaissement de la tranche 2006 de 16 millions $US plus des coûts d'appui associés de 1,2 million $US dans le cadre de la phase I du plan sectoriel.

19. Pour consultation rapide, les objectifs d'élimination et les niveaux associés de financement dans l'Accord en matière de CTC (Phase I) sont reproduits ci-dessous.

		Consom-mation de base[1/]	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
		Tonnes PAO										
1.	Production et importations de CTC maximales admissibles	86 280	64 152	64 152	61 514	54 857	38 686	32 044	26 457	23 583	17 592	11 990
2.	CTC - matière première	S.O.	55 319	45 400	45 333	39 306	28 446	21 276	15 129	11 662	5 042	-
3.	Consommation maximale disponible de CTC pour autres applications AT [2/]	S.O.	S.O.	7 389	7 832	8 302	8 800	9 328	9 888	10 481	11 110	11 997
4.	Consommation maximale admissible de CTC pour les applications AT à l'Appendice 2	3 825	4 347	5 049	5 049	5 049	493	493	493	493	493	220
5.	Autres usages non déterminés	S.O.	S.O.	6 314	3 300	2 200	947	947	947	947	947	-
6.	Consommation maximale admissible de CFC-113 dans le secteur PA	17,2	17,2	17,2	17,2	14	14	10,8	8,4	0	0	0
7.	**SOUTIEN DU FONDS MULTILATÉRAL (en milliers de $US)**											**Total $**
8.	Financement du FM			2 000	20 000[3/]	16 000[3/]	2 000[3/]	16 000[3/]	5 000[3/]	3 000[3/]	1 000[3/]	65 000
9.	Coûts d'appui d'agence			150	1 500	1 200	150	1 200	375	225	75	4 875

[1/] La consommation de base comprend la consommation moyenne de CTC pour la période 1998-2000.
[2/] Applications à l'Appendice IV.
[3/] Sous réserve de l'examen du calendrier de décaissement à la 39e réunion du Comité exécutif.

20. La vérification de la production et de la consommation de CTC et la consommation de CFC-113 en 2005 comporte trois volets : vérification de la production de CTC, vérification de la consommation de CTC et CFC-113 comme agents de transformation, et sommaire des vérifications.

Vérification de la production de CTC en 2005

21. La vérification de la production a été effectuée en février 2006 par la même équipe de trois consultants qui avait effectué la vérification en 2004 et qui était composée de deux spécialistes techniques et d'un analyste financier. Le rapport comprenait une partie vérification technique et une partie vérification financière.

22. La partie vérification technique contenait les résultats des visites et l'étude de 11 des 16 producteurs de CTC en Chine. Les 5 autres producteurs avaient cessé leurs opérations et n'ont donc pas été visités. Le tableau 1 du rapport de vérification de 2005 de la production de CTC fournit une liste des 16 usines, avec le nom de l'usine, le contingent de production 2005 attribué par la State Environmental Protection Agency, la production réelle 2005 vérifiée, et des observations sur l'état de l'usine (fermée ou en production).

23. La vérification a permis de recueillir les renseignements suivants de chaque usine : identification de l'usine; historique de l'usine (date de construction, nombre de chaînes de production de CTC, capacité, consommation de base pour la production en 2002 et 2001); procédé de production de l'usine; contingent de production pour 2004 attribué par la State

Environmental Protection Agency; relevés quotidiens de production et dossiers de transfert; inventaire quotidien et mensuel des stocks de CTC; et données sur le CTC emballé pour la vente à partir des dossiers quotidiens de transfert de l'entrepôt du produit.

24. L'équipe de vérification a aussi vérifié la consommation de matières premières, de chlore, et de matières premières organiques comme le méthane, le méthanol et l'éthylène à partir des dossiers quotidiens de transfert de chaque quart de travail et des stocks de clôture de l'inventaire mensuel de la production. En outre, l'équipe a aussi calculé la production de CTC afin de déterminer la proportion de la consommation des matières premières et de la comparer avec les valeurs théoriques pour déterminer si les écarts entre ces valeurs étaient raisonnables.

25. Puisque la production des produits de chlorométhane a généré une série d'autres produits en plus du CTC, l'équipe a aussi recueilli des informations sur la production des co-produits chlorométhane, dichlorométhane, chloroforme et perchloroéthylène, afin de déterminer le bilan matières entre les entrées et les sorties.

26. En même temps, l'analyste financier de l'équipe a examiné la fiabilité du système comptable, les factures des achats et les registres de vente. L'uniformité des résultats de la vérification technique et de la vérification financière a alors été comparée et, en fonction des données recueillies, l'équipe a tiré ses conclusion à savoir si l'usine respectait les contingents attribuéspar la State Environmental Protection Agency.

27. Le rapport de vérification a présenté un sommaire de la vérification effectuée à chaque usine. Il comprenait la vérification de la production de CTC, des stocks et des ventes; l'approvisionnement et la consommation de chlore; l'approvisionnement et la consommation de méthane, méthanol, et éthylène en fonction de la technologie utilisée dans l'usine; la présentation des résultats, sous forme tabulaire, de la production de CTC, des co-produits de chlorométhane, de la consommation de matières premières et des rapports. La vérification de chaque usine se terminait par une évaluation de la capacité de l'usine à respecter son contingent de production attribué pour 2005 après avoir comparé les résultats des vérifications financière et technique parallèlement en cours. Le rapport présentait finalement les résultats sur le niveau de production de CTC, la consommation de matières premières et le rapport, et le nombre de jours d'exploitation.

28. L'équipe de vérification a indiqué que 6 des 11 producteurs de CTC visités ont produit plus que les contingents attribués par la State Environmental Protection Agency et, ce faisant, la production totale de CTC a été de 43 203 tonnes métriques en 2005. Toutefois, la State Environmental Protection Agency a indiqué que 8 586,8 tonnes métriques étaient utilisées comme matière première dans la production de produits chimiques sans SAO et que 132,9 tonnes métriques supplémentaires étaient déclarées détruites. Le tableau 2-1 du rapport de vérification de la production de CTC de 2005 présente une liste de 23 usages de CTC comme matière première pour la production de produits chimiques sans SAO en 2005, qui a été fournie par la State Environmental Protection Agency avec des données détaillées sur les applications, les achats de CTC, et la consommation de CTC en 2005. Le tableau 2-2 contient un rapport de la State Environmental Protection Agency sur la destruction du CTC en 2005, avec des données sur le mode de disposition et la quantité de CTC détruite ou transformée, ainsi que la source du

rapport. L'équipe de vérification n'a visité aucune des entreprises qui prétendaient utiliser du CTC comme matière première pour la production de produits chimiques sans SAO.

29. Enfin, la vérification a conclu que la Chine a produit 37 931 tonnes PAO (34 483,2 tonnes métriques) de CTC en 2005 après déduction des 8 586,8 tonnes métriques affectées à la production de produits chimiques sans SAO et des 132,9 tonnes métriques détruites. La production était donc inférieure à l'objectif visé de 38 686 tonnes PAO (35 169,09 tonnes métriques) fixé dans l'Accord avec le Comité exécutif.

30. Le Secrétariat, conformément à la pratique établie lors de la présentation de documents sur la vérification de la production, n'inclut pas la partie données. Toutefois, tout membre du Comité exécutif peut consulter ces données sur demande.

Vérification de la consommation de CTC et de CFC-113 utilisés comme agents de transformation dans le cadre de la Phase I en 2005

31. Une équipe de deux personnes, un spécialiste technique et un analyste financier, ont procédé à la vérification de la consommation de CTC et de CFC-113 en février 2006. L'équipe a vérifié la consommation de CTC et de CFC-113 à chacune des cinq entreprises qui utilisaient actuellement du CTC et du CFC-113 comme agents de transformation pour les applications couvertes par le plan sectoriel CTC/agents de transformation (Phase I). Le tableau 1 du rapport de vérification de la consommation de CTC et de CFC-113 donne une liste des entreprises avec des données sur l'utilisation du CTC, le nom de l'usine, le stock d'ouverture et le stock de clôture, les achats et la consommation de CTC ou de CFC-113 en 2005.

32. La vérification a commencé par un examen de l'historique de l'usine, y compris la date de construction, le nombre de circuits de production pour chaque utilisation de CTC ou de CFC-113, et la capacité de production dans l'année de base 2001 et par la suite. Elle a alors examiné les données suivantes comme données primaires :

- Contingents de consommation de CTC ou de CFC-113 attribués par la State Environmental Protection Agency pour 2005;

- Bons de commande et registres quotidiens des mouvements de CTC ou de CFC-113 (de l'extérieur à l'entrepôt de l'usine, et de l'entrepôt de l'usine à l'entrepôt de l'atelier);

- Inventaire des stocks de CTC ou de CFC-113, y compris la quantité de CTC ou de CFC-113 restant dans l'entrepôt de l'usine et le système de production; et

- Consommation mensuelle de CTC ou de CFC-113, laquelle a été calculée comme suit : stock d'ouverture d'agents de transformation + achat d'agents de transformation – stock de clôture PA

33. L'équipe a aussi recueilli comme données justificatives des renseignements secondaires sur les registres d'emballage et de mouvement de CR, CSM et PTFE du circuit de production à l'entrepôt du produit; les registres d'envoi et de mouvement de CR, CSM et PTFE hors de l'entrepôt du produit pour la vente; les registres d'inventaire hebdomadaires et mensuels des

stocks de CR, CSM et PTFE; les relevés quotidiens de production et le nombre de jours d'exploitation; et les rapports de consommation de CTC/CR, CTC/CSM ou CFC-113/PTFE.

34. Le rapport présente un sommaire de chaque entreprise visitée, y compris la description de l'entreprise, la vérification effectuée et les résultats. Les résultats comprennent la présentation des stocks d'ouverture et de clôture, l'approvisionnement en CTC et la consommation de CTC pour l'année. Il y a aussi une évaluation de la production réelle du produit final de l'usine obtenue par l'examen de la production et des mouvements des stocks. Le CTC acheté par l'usine a été traité comme une partie de la consommation nationale en 2005 et a été comparé au contingent attribué par la State Environmental Protection Agency.

35. La vérification a confirmé que les achats vérifiés de CTC et CFC-113 en 2005 dans le secteur des agents de transformation (Phase I) étaient les suivants :

- **Achat et consommation de CTC** : L'achat et la consommation de CTC en 2005 ont été de 485,02 tonnes PAO et 1 394,65 tonnes PAO respectivement, dont 909,63 tonnes PAO de CTC ont été consommées à partir des réserves de 2004, tandis que l'achat de 485,02 tonnes PAO de CTC se trouvait inférieur à la consommation maximale admissible de CTC en 2005 (493,00 tonnes PAO) dans le secteur des agents de transformation.

- **Achat et consommation de CFC-113 :** L'achat et la consommation de CFC-113 vérifiés en 2005 ont été de 3,20 tonnes PAO et 3,20 tonnes PAO, respectivement, ce qui est inférieur au maximum admissible pour la consommation de CFC-113 en 2005 (14,00 tonnes PAO) dans le secteur des agents de transformation.

36. La vérification souligne aussi que, en 2005, les essais de production et la modification des équipements du nouveau circuit de CSM installé chez Jilin Chemical (décembre 2004) n'avaient pas porté fruit et les rapports de consommation de CTC sont demeurés élevés.

Sommaire des rapports de vérification

37. Le sommaire de la vérification offre un aperçu de la production et de la consommation de CTC ainsi que de la consommation de CFC-113 par rapport aux objectifs fixés dans l'Accord approuvé à la 38e réunion. Il fournit aussi une évaluation des résultats de la vérification par rapport aux exigences du Protocole de Montréal pour les substances visées. Il comprend une section sur la vérification de la production de CTC, une section sur l'utilisation de CTC comme matière première par les producteurs de CFC, une section sur la consommation de CTC comme matière première pour la production de produits chimiques sans SAO, une section sur l'utilisation du CTC comme agent de transformation pour les applications couvertes par le plan sectoriel (Phase I), les importations et exportations de CTC, et enfin une évaluation globale de la production et de la consommation de CTC en Chine pour 2005 basée sur les définitions du Protocole de Montréal en matière de production et de consommation. Pour faciliter la consultation, cinq des tableaux sommaires de l'état récapitulatif de la vérification de 2005 pour le plan sectoriel CTC/agents de transformation (Phase I) , les tableaux 1, 2, 6, 7 et 8, sont reproduits ci-dessous.

38. Le tableau 1 présente une évaluation de la production de CTC ainsi que de la consommation de CTC et de CFC-113 comme agents de transformations en 2005 en Chine par rapport aux quatre critères établis dans l'Accord dans le cadre de la phase I du plan sectoriel.

Tableau 1 : Production et consommation de CTC (tonnes PAO)

An	Production de CTC * (ligne 1 de l'Accord)		Utilisation du CTC comme matière première pour la consommation de CFC (ligne 2 de l'Accord)		Utilisation du CTC pour les 25 applications AT (ligne 4 de l'Accord)		Utilisation du CFC-113 pour les 25 applications AT (ligne 5 de l'Accord)	
	Autorisé	Vérifié	Autorisé	Vérifié	Autorisé	Vérifié	Autorisé	Vérifié
Base	86 280	S.O.	S.O.	S.O.	3 825	S.O.	17,2	S.O.
2001	64 152	S.O.	55 139	S.O.	4 347	S.O.	17,2	S.O.
2002	64 152	S.O.	45 400	S.O.	5 049	S.O.	17,2	S.O.
2003	61 514	59 860	45 333	39 839	5 049	3 080	17,2	17,1
2004	54 857	50 195	39 306	34 168	5 049	3 886	14	10,8
2005	**38 686**	**33 080**	**28 446**	**25 811,3**	**493**	**485,02**	**14**	**3,2**
2006	32 044		21 276		493		10,8	
2007	26 457		15 129		493		8,4	
2008	23 583		11 662		493		0	
2009	17 592		5 042		493		0	
2010	11 990		0		220		0	

39. Le tableau 2 offre une évaluation de la production réelle de CTC vérifiée, par entreprise et pour l'ensemble du pays, par rapport aux objectifs et aux contingents admissibles. Il comprend aussi le CTC utilisé comme matière première pour la production de produits chimiques sans SAO et le CTC détruit tel que l'a déclaré la State Environmental Protection Agency; et le calcul de la production de CTC qui serait mesurée par rapport aux objectifs fixés dans l'Accord.

40. La State Environmental Protection Agency a déclaré avoir inclus les entreprises et les utilisateurs de CTC pour des applications de matières premières sans SAO dans la vérification globale du CTC et réclamé au total 14 296,84 tonnes PAO consommées comme matière première à ces fins en 2005. Cette quantité a été déclarée comme incluant des applications d'agents de transformation nouvellement déterminées mais non encore confirmées par le Groupe de l'évaluation technique et économique. Conformément aux dispositions du Protocole de Montréal, la production totale de CTC a été réduite de 14 296,84 tonnes PAO pour les applications de matières premières sans SAO.

41. La State Environmental Protection Agency a aussi souligné que d'autres applications de matières premières et d'autres entreprises pourraient être déterminées et confirmées dans le cadre du travail effectué actuellement par la State Environmental Protection Agency pour la mise en oeuvre du plan sectoriel CTC/agents de transformation (Phases I et II). Comme la liste des entreprises et de leur production est commercialement sensible, cette liste n'a pas été incluse ici mais elle peut être consultée par le Secrétariat sur demande pour examen interne.

Tableau 2 : Sommaire des contingents attribués par la State Environmental Protection Agency et production de CTC réelle vérifiée en 2005

Nom du producteur de CTC		Contingent de production de CTC 2005 (tonnes métriques)	Production 2005 de CTC (tonnes métriques)	Observations
CTC 1	Luzhou North Chemical Co. , Ltd.	2 106,00	2 098,63	
CTC 2	Zhejiang Juhua Fluoro-chemical Co., Ltd.	13 604,00	14 951,88	
CTC 3	Liaoning Panjing No. 3 Chemical Plant	0	0	Usine fermée.
CTC 4	Chongqing Tianxuan Chemical Co., Ltd.	0	0	Usine fermée 26 déc. 2003
CTC 6	Chongqing Tianyuan Chemical General Plant	0	0	Usine fermée 16 avril 2004
CTC 7	Taiyuan Chemical Industrial Co., Ltd.	0	0	Usine fermée
CTC 8	Luzhou Xinfu Chemical Industry Co., Ltd.	717,00	705,54	Usine fermée
CTC 9	Jiangsu Meilan Chemical Co., Ltd.	2 303,00	4 320,08	Une chaîne entrée en production en 2005 pour convertir le CTC en CM1.
CTC 10	Guangzhou Hoton Chemical (Group) Co., Ltd.	0	0	Usine fermée
CTC 11	Sichuan Honghe Fine Chemical Co., Ltd.	5 668,00	5 767,154	
CTC 12	Shanghai Chlor-Alkali	6 609,00	7 211,10	
CTC 14	Wuxi Greenapple Chemical Co., Ltd.	1 000,00	999,74	
CTC 15	Shandong Jinling Group Co., Ltd.	1 100,00	4 198,12	Deux nouvelles chaînes de CM entrées en production en 2005.
CTC 16	Shandong Dongyue Fluoro-Silicon Material Co., Ltd.	1 461,00	2 350,20	
CTC 5	Chongqing Tiansheng Chemical Co., Ltd.	5,00	5,00	Usine de distillation de résidus de CTC
CTC 13	Quzhou Jiuzhou Chemical Co., Ltd.	596,00	595,56	Usine de distillation de résidus de CTC
Production brute de CTC en Chine en 2005		**35 169,00 TM**	**43 203,00 TM (47 523,30 tonnes PAO)**	
Utilisé comme matière première de produits chimiques sans SAO			12 997,13 TM (14 296,84 tonnes PAO)	Déclaré par la SEPA
Détruites par incinération			132,99 TM (146,29 tonnes PAO)	Déclaré par la SEPA
Production de CTC en 2005 selon l'Accord			**30 072,88 TM (33 080,17 tonnes PAO)**	Production brute – utilisations de matières premières sans SAO – quantité détruite
Limite de l'Accord en matière de production de CTC en Chine en 2005			**38 686,00 tonnes PAO**	

42. Le tableau 6 comprend une évaluation de la production de CTC conformément à la définition du Protocole de Montréal, à l'aide des résultats de la vérification.

Tableau 6 : Production nationale de CTC

Production de CTC	(tonnes PAO)
Production brute de CTC en 2005	**47 523,30**
CTC utilisé comme matière première pour des produits chimiques sans SAO	-14 296,84
CTC détruites par des technologies approuvées par les Parties	-146,29
Production de CTC en 2005 selon l'Accord	**33 080,17**
Utilisé comme matière première pour la production de CFC	-25 811,30

Production nationale de CTC selon le Protocole de Montréal	**7 268,87**

43. Le tableau 7 comprend une évaluation de la consommation de CTC selon la définition du Protocole de Montréal et le calendrier de contrôle.

Tableau 7 : Consommation nationale de CTC

Production et consommation de CTC	(tonnes PAO)	Consommation de base - PM
Production de CTC selon le Protocole de Montréal	7 268,87	29 367,4
Importations de CTC	0	
Exportations de CTC	5,23	
Consommation de CTC selon le Protocole de Montréal	7 263,64	55 903,8

44. Enfin, le tableau 8 montre une évaluation de la position de la Chine en 2005 en ce qui a trait à la production et à la consommation de CTC en fonction des exigences du Protocole de Montréal.

Tableau 8 : Exigences du Protocole de Montréal et production et consommation nationale.

	Production (tonnes PAO)	Consommation (tonnes PAO)
Consommation de base selon le Protocole de Montréal	29 367,4	55 903,8
Limite du Protocole de Montréal en 2005 (85 % de la consommation de base)	7 341,85*	8 385,57
Production réelle de CTC et consommation en 2005	7 268,87	7 263,64

* La production de CTC autorisée pour consommation comprend la production supplémentaire de 10 % du niveau de base autorisée pour les besoins intérieurs de base de 2005 à 2009 et 15 % à compter de 2010.

OBSERVATIONS ET RECOMMANDATIONS DU SECRÉTARIAT

OBSERVATIONS

Vérification de la production et de la consommation de CTC et de la consommation de CFC-113 en 2005

45. La vérification a été effectuée conformément au cadre de vérification élaboré par la Banque mondiale pour les vérifications de l'élimination du CTC dans les plans sectoriels de la Chine et de l'Inde et dont le Comité exécutif a pris note. Le sommaire de la vérification a été particulièrement utile, car il a fourni un aperçu de la mise en oeuvre du plan sectoriel visant le CTC (Phase I) qui comprenait une évaluation de la production et de la consommation de CTC ainsi que de la consommation de CFC-113 par rapport aux objectifs fixés dans l'Accord, et aussi une évaluation de la possibilité que la Chine respecte les exigences du Protocole de Montréal.

46. L'évaluation globale de la vérification a confirmé que la Chine a produit au total 47 523,3 tonnes PAO de CTC dont la Chine déclare avoir utilisé 14 296 tonnes PAO comme matière première pour la production de produits chimiques sans SAO et détruit 146,24 tonnes PAO supplémentaires. Toutefois, la partie production de CTC de la vérification a conclu que la State Environmental Protection Agency avait déclaré un total de 9 445,48 tonnes PAO de CTC utilisées comme matière première pour produire des produits chimiques sans SAO et fourni une liste de ces applications. Il n'y a eu aucun changement en ce qui a trait au CTC qu'on déclare avoir détruit. La quantité totale de CTC utilisé comme matière première pour la production de produits chimiques sans SAO et détruite serait donc de 9 591,72 tonnes PAO, au lieu des 14 442 tonnes PAO déclarées dans la partie évaluation globale de la vérification. Il existe un écart d'environ 4 800 tonnes PAO dans la quantité de production de CTC déclarée utilisée comme matière première pour des produits chimiques sans SAO.

47. Cette divergence a des répercussions sur la capacité de la Chine à respecter les objectifs fixés dans l'Accord et les exigences dans le cadre du Protocole de Montréal. Si la valeur de 14 442 tonnes PAO indiquée dans l'évaluation globale était utilisée, la production totale de CTC pour usages réglementés et matière première pour le CFC deviendrait 33 081 tonnes PAO (47 523,3 – 14 442), ce qui est inférieur à l'objectif de production maximale de CTC de 38 686 tonnes PAO fixé dans l'Accord pour 2005. En soustrayant encore 25 811,3 tonnes PAO de 33 081 tonnes PAO, la quantité confirmée par la vérification de la production de CTC comme CTC utilisé comme matière première pour la production de CFC, les 7 270 tonnes PAO qui restent placeraient la Chine en deçà de l'objectif de conformité du Protocole de Montréal établi à 7 341 tonnes PAO.

48. Toutefois, si la valeur de 9 591 tonnes PAO déclarées à la partie vérification de la production de CTC était utilisée, la quantité totale de CTC pour usages réglementés et comme matière première pour la production de CFC serait de 37 931 tonnes PAO (47 523,3 – 9591,72) et permettrait à la Chine de demeurer dans les limites de l'objectif de production maximum de CTC de 38 686 tonnes PAO fixé dans l'Accord. Toutefois, en soustrayant encore 25 811,3 tonnes PAO des 37 931 tonnes PAO, la quantité confirmée par la vérification de la production de CTC comme CTC utilisé comme matière première pour la production de CFC, les 12 120 tonnes PAO qui restent placeraient la Chine au-delà de l'objectif de conformité du Protocole de Montréal établi à 7 341 tonnes PAO.

49. Comme il est possible de le constater dans l'analyse ci-dessus, l'écart des données au-delà de la production de CTC déclaré être utilisé comme matière première pour produire des produits chimiques sans SAO n'aurait aucune incidence sur la capacité de la Chine à respecter les objectifs de l'Accord, mais il pourrait remettre en question sa conformité dans le cadre du Protocole de Montréal. L'équipe de vérification de la Banque mondiale n'a pu clarifier la situation, parce qu'elle n'a visité aucune des entreprises où l'on utilisait ces applications pour produire des produits chimiques sans SAO.

50. Les données sur la production de CTC utilisé comme matière première pour des produits chimiques sans SAO ont été communiquées par la State Environmental Protection Agency. Dans le cas de la vérification de la production de CTC, la State Environmental Protection Agency a publié une liste des applications pour cette matière première, qui indique le type, l'achat de CTC, et la consommation de CTC en 2005. La partie évaluation globale ne présente pas tous les

détails, donnant comme raison le secret des affaires, mais s'est engagée à fournir des informations au Secrétariat pour examen interne. Le Secrétariat a demandé ces informations mais ne les a pas encore reçues.

51. Il est vrai que la décision 44/29 a clarifié le fait que l'Accord pour la phase I en Chine ne devrait pas inclure la production de CTC pour utilisation comme matière première pour des produits chimiques sans SAO. Toutefois, cette même décision a aussi exigé que la Chine vérifie ces utilisations et en fasse le rapport au Secrétariat de l'ozone en vertu de l'Article 7 du Protocole de Montréal. La State Environmental Protection Agency a indiqué avoir inclus ces utilisations dans la vérification globale. Puisque l'équipe de vérification indépendante de la Banque mondiale n'avait couvert aucune des applications, il serait important de connaître la procédure et l'organisation qui ont été employées par la State Environmental Protection Agency pour la vérification. Il serait aussi important de savoir si la vérification a utilisé la définition de matière première telle qu'elle apparaît dans le Protocole de Montréal et de connaître les résultats de cette vérification.

52. Selon la politique du Protocole de Montréal, la détermination des applications de CTC comme matière première incombe aux gouvernements nationaux. Toutefois, s'il existait un écart de plusieurs milliers de tonnes PAO pouvant avoir des répercussions sur la capacité d'un pays à respecter ses obligations dans le cadre du Protocole de Montréal, la Banque mondiale serait-elle tenue, lors de la vérification indépendante, d'inclure ces entreprises pour vérification sur place, même sur une base sélective.

53. Autre point, il a été confirmé lors de la vérification de la consommation de CTC que, en 2005, les essais de production et les modifications apportées aux équipements du nouveau circuit CSM mis en place chez Jilin Chemical (décembre 2004) n'avaient pas réussi, et les rapports de consommation de CTC sont demeurés élevés. Puisque le projet visait à réduire éventuellement le niveau d'émissions à 220 tonnes PAO en 2010 dans le cadre de la phase I du plan sectoriel, quel serait la prochaine étape à suivre pour réaliser l'objectif en matière d'émissions si ce projet ne pouvait pas le faire.

54. Selon la pratique de présentation de rapports de vérification similaires dans le secteur de la production, le Secrétariat ne présente pas la partie données de la vérification, mais les membres du Comité exécutif pourront les consulter sur demande.

55. Le Secrétariat a communiqué ces questions à la Banque mondiale pour clarification mais n'avait pas encore reçu de réponse au moment de la rédaction du présent rapport.

RECOMMANDATION

56. À venir.

ÉLIMINATION DE LA PRODUCTION ET DE LA CONSOMMATION DU CTC UTILISÉ COMME AGENT DE TRANSFORMATION ET DANS D'AUTRES USAGES NON PRÉCISÉS (PHASE II) : PROGRAMME ANNUEL 2006

DESCRITPION DU PROJET

Historique

57. À sa 47e réunion en 2005, le Comité exécutif a approuvé, en principe, le plan sectoriel pour l'élimination de l'utilisation des SAO comme agents de transformation et de la production correspondante de tétrachlorure de carbone en Chine (phase II), au montant total de 46,5 millions $US, plus les coûts d'appui de 3 487 500 $US pour la Banque mondiale. La réunion a décaissé 15 millions $US, plus les coûts d'appui de 1,125 millions $US pour la Banque mondiale au titre de la première tranche du projet, et a demandé à la Banque et au Secrétariat de convenir des autres tranches et de les préciser dans le projet d'accord à soumettre à la 48e réunion. Le Comité exécutif a également demandé à la Banque mondiale de présenter à la 48e réunion, un projet d'accord final pour le projet, avec un plan annuel de mise en œuvre pour l'année 2006 (décision 47/54).

58. La Banque mondiale a soumis, au nom du gouvernement de la Chine, le programme annuel 2006 du plan sectoriel pour l'élimination de l'utilisation des SAO utilisées comme agents de transformation et de la production correspondante de CTC en Chine. Les objectifs d'élimination des phases I et II (Phase II) du plan sectoriel pour l'année 2006 sont combinés et présentés plus bas dans le présent document, en prenant note que le programme annuel de travail pour 2006 pour la Phase I a été approuvé à la 47e réunion, et le financement retenu en attendant la présentation du rapport de vérification sur la mise en œuvre du programme annuel de travail de 2005 (décision 47/27). Le rapport de vérification de la Phase I du plan sectoriel est également présenté à cette réunion.

59. La Banque mondiale a également soumis le projet d'accord pour la Phase II du plan sectoriel et demande un autre financement de 10 millions $US pour le programme annuel de travail de 2006, plus les coûts d'appui de 750 000 $US. Le programme annuel de travail pour 2006, ainsi que le projet d'accord, sont joints en annexe.

Programme de travail annuel pour 2006

60. Le programme propose que, dans le cadre de l'ensemble des objectifs d'élimination du programme annuel de travail de 2006 pour la Phase II, la Chine soit invitée à s'assurer que sa consommation de CTC utilisée comme agent de transformation ne dépasse pas 7 892 tonnes PAO, et la production 29 661 tonnes PAO de substances réglementées utilisées comme matières premières pour la production de CFC.

61. Le programme annuel de travail propose des activités à entreprendre pour atteindre ces objectifs, activités qui s'appliquent aux niveaux des politiques et des entreprises, ainsi que de

l'assistance technique. La plupart de ces activités sont actuellement mises en œuvre dans le cadre de la Phase I du plan sectoriel et sont renforcées et améliorées pour couvrir la Phase II.

62. Au niveau des politiques, le gouvernement envisage l'amélioration du système des quotas de production de CTC et du système des quotas de consommation pour le secteur des agents de transformation, ainsi que le renforcement du système d'enregistrement des ventes de CTC. En outre, la « Circulaire complémentaire sur l'interdiction stricte de nouvelle construction ou de l'expansion de la capacité des lignes de production utilisant le CTC » sera promulguée en 2006. La circulaire interdira toute nouvelle construction ainsi que l'expansion de la capacité de toutes les lignes de production qui utilisent le CTC comme agent de transformation. La circulaire a pour objectif de freiner l'augmentation rapide de la consommation du CTC pour les nouvelles applications potentielles comme agent de transformation qui n'ont pas encore été étudiées et approuvées par la Partie. Sa promulgation facilitera aussi l'élimination du CTC utilisé dans les nouvelles applications potentielles d'agent de transformation.

63. Au niveau des entreprises, cinq types d'activités seront mises en œuvre, notamment : les quotas de production pour les producteurs du CTC et pour le contrôle des émissions, les reconversions, les fermetures d'entreprises d'agents de transformation et la signature d'accords avec les entreprises pour la cessation permanente de l'utilisation du CTC pour certaines lignes de production liées à 13 applications d'agents de transformation. Toutes ces activités seront basées sur les attributions de quotas. Contrairement à la dernière activité qui est nouvelle, presque toutes les autres activités sont un prolongement des activités qui existaient déjà dans la Phase I. Certaines des entreprises qui utilisent le CTC dans 13 des applications ne veulent pas démanteler la ligne de production multifonctionnelle, et s'engagent plutôt à cesser la fabrication des produits liés au CTC et à utiliser la ligne de production uniquement pour la fabrication d'autres produits, avec une technologie sans SAO. Il sera demandé à ces entreprises de signer un accord sur la cessation permanente de l'utilisation du CTC comme agent de transformation pour les produits liés au CTC.

64. Au niveau du programme de l'assistance technique, hormis l'extension du Système de gestion de l'information pour inclure les SAO et la formation du personnel impliqué dans la mise en œuvre des activité d'élimination, les activités suivantes seront entreprises en 2006 :

- Étude nationale sur les nouveaux consommateurs d'agents de transformation autres que ceux des Phases I et II : Étant donné que le gouvernement de la Chine avait promis de fournir un rapport détaillé sur les nouvelles applications d'agents de transformation d'ici la fin de 2006, et d'éliminer les nouvelles applications d'agents de transformation une fois que les Parties en auraient établi la liste, il est important et urgent pour la Chine d'identifier clairement et le plus tôt possible, tous les consommateurs d'agents de transformation autres que ceux inclus dans les Phases I et II. Un consultant sera sélectionné au début de 2006 pour mener l'étude qui couvrira toutes les conditions de production, le processus et la capacité de production, la consommation du CTC, les connaissances de l'entreprise en ce qui concerne les technologies de remplacement possibles, etc. Cette étude aidera à la Chine à contrôler l'élimination future des nouveaux agents de transformation.

- Étude de la consommation et des émissions de CTC dans la fabrication de polypropylène chloré et d'acétate d'éthène-vinyle chloré : La Chine a demandé 994 tonnes PAO pour la consommation de CTC dans la Phase II du plan sectoriel en 2010. Cependant, les 994 tonnes représentent les émissions de CTC. Étant donné que les Parties n'ont pas encore déterminé les niveaux des émissions des SAO pour les utilisations d'agents de transformation par les pays visés à l'Article 5, il n'est pas certain que le maintien des 994 tonnes PAO de CTC en 2010 est faisable et qu'il sera accepté par les Parties. Par conséquent, le gouvernement de la Chine estime qu'il est essentiel de mener une étude détaillée sur la consommation et les émissions de CTC dans la production de polypropylène chloré et d'acétate d'éthène-vinyle chloré.

65. La soumission comporte deux annexes : une annexe qui fournit une liste des producteurs de CTC et leur situation, et l'autre qui contient des informations sur les entreprises d'agents de transformation, en vertu de la Phase II.

Projet d'accord

66. L'approbation à 47e réunion, de la Phase II du plan sectoriel contient un certain nombre de conditions qui doivent être incluses dans le projet d'accord. Ces conditions qui font partie de la décision 47/54 stipulent entre autres que :

> "(a) L'approbation est accordée sous réserve de la détermination par les Parties des niveaux d'émission résiduels maximums pour les utilisations comme agents de transformation par les pays visés à l'article 5;
>
> (b) La Chine réduira ses émissions résiduelles associées aux utilisations comme agents de transformation dans la fabrication de polypropylène chloré et d'acétate d'éthène-vinyle chloré dont il est question dans la Phase II des plans sectoriels sur le CTC à des niveaux auxquels pourraient éventuellement convenir les Parties, sans demander l'assistance financière supplémentaire du Fonds multilatéral;
>
> (c) La question de la réduction des émissions résiduelles associées aux utilisations comme agents de transformation dans la production de polyoéfine chloro-sulphonée dont il est question dans la Phase I du plan sectoriel sur le CTC, doit entrer en ligne de compte dans la mise au point de l'accord de la Phase II du plan sectoriel;
>
> (d) Si lors de la mise en oeuvre de la Phase II du plan sectoriel, ou à n'importe quel moment par la suite, la Chine découvre des utilisations, les tonnes de CTC et/ou des usages de CTC (y compris de nouvelles catégories d'agents de transformation) de CTC non précisés dans la phase II du plan sectoriel sur le CTC, la Chine s'engage à les éliminer en respectant le calendrier d'élimination compris dans l'accord (qui sera proposé à la 48e réunion) sans coût supplémentaire pour le Fonds multilatéral.»

67. Le projet d'accord proposé par la Banque mondiale est présenté selon le modèle de présentation des accords pluriannuels du Fonds multilatéral et ne contient pas les éléments susmentionnés.

OBSERVATIONS ET RECOMMANDATIONS DU SECRÉTARIAT

OBSERVATIONS

68. Le Secrétariat a communiqué à la Banque mondiale les observations sur le programme annuel de travail proposé pour 2006 ainsi que sur le projet d'accord, mais au moment de la rédaction du présent document, aucune réponse n'avait été reçue. Le résumé de ces observations est présenté ici.

Projet d'accord

69. Le Secrétariat a pris note qu'il serait utile pour la surveillance future, de combiner les objectifs clés des Phases I et II. Nous suggérons donc à cette fin, certains changements dans l'Appendice 2-A; toutefois, il est demandé à la Banque de vérifier, dans un souci de cohérence, les autres parties du projet d'accord

70. Le Secrétariat a pris note que dans l'Appendice 2-A, conformément aux données fournies en vertu de l'Article 7, la consommation de référence pour le CTC dans la ligne 2 devrait être 55 891 et non 55 900. Par conséquent, la consommation maximum admissible conformément aux mesures de contrôle du Protocole de Montréal devrait être 8 383,65, et non 8 385, pour les années 2006-2009.

71. Le Plan d'action constitué par le Chapitre 7 du document de projet présenté à la 47^{e} réunion et sur la base duquel le projet a été approuvé, indiquait un objectif annuel de contrôle de 6 945 tonnes PAO pour la Phase II au cours de la période 2006-2009. Le Tableau contenu dans le plan annuel de mise en œuvre pour 2006 fait état d'un objectif de 7 892 tonnes PAO. Il a par conséquent été demandé à la Banque de modifier l'objectif, pour assurer la cohérence avec le projet tel qu'approuvé en principe. Le Plan d'action indique également une limite en cours de 947 tonnes PAO pour « les autres usages non précisés ». Cela fait également partie de l'approbation en principe et devrait figurer dans le tableau contenu dans le plan annuel de mise en œuvre pour 2006, à la place de «ne s'applique» et des entrées de « TBD ».

72. Le Secrétariat a procédé aux changements proposés dans le tableau ci-dessous et demande à la Banque mondiale de vérifier les autres parties du projet d'accord aux fins de cohérence.

	Référence (2003)	2006	2007	2008	2009	2010
1. Production maximum admissible de CTC pour consommation en vertu du Protocole de Montréal	29 367	7 342	7 342	7 342	7 342	4 405
2. Consommation maximum admissible de CTC en vertu des mesures de contrôle du Protocole de Montréal	55 891	8 383,65	8 383,65	8 383,65	8 383,65	0
3. Production maximum admissible de CTC utilisée comme matière première pour le CFC		21 276	11 396	847	847	0
4. Consommation maximum admissible de CTC pour les usages règlementés						
4.1. Objectif de la Phase I	5 049	493	493	493	493	220*
4.2. Objectif de la Phase II	5 411	6 945	6 945	6 945	6 945	994*
TOTAL DES OBJECTIFS	10 460	7 438	7 438	7 438	7 438	1 214*
5. Utilisations potentielles de nouveaux agents de transformation	3 300	947	947	947	947	0
6. Consommation maximum admissible de CFC-113 dans le secteur des agents de transformation	17,2	10,8	8,4	0	0	0
7. Financement du Fonds multilatéral ($US)						**TOTAL**
7.1 Financement du Fonds multilatéral Phase I						
7.2. Financement du Fonds multilatéral Phase II		25 000	10 000	10 000	1 500	46 500
FINANCEMENT TOTAL						
8. Coûts d'appui d'agence (en milliers $US)						**TOTAL**

	Référence (2003)	2006	2007	2008	2009	2010
8.1 Coûts d'appui d'agence (Phase I)						
8.2 Coûts d'appui d'agence (Phase II)						
TOTAL DES COÛTS D'APPUI D'AGENCE						

Note: *Les émissions indiquées sont acceptées par les Parties comme admissibles, en vertu de la décision X/14

73. Il a été indiqué à la Banque mondiale que, conformément à la décision 47/54, le paragraphe 2 de l'accord doit être amendé pour inclure la phrase suivante: « La Chine s'engage à respecter toutes limites d'émissions de CTC pour les pays visés à l'Article 5 que les Parties pourraient convenir, sans demander un financement supplémentaire au Fonds multilatéral ». Il faudrait aussi ajouter la clause suivante : « l'Accord entre en vigueur sous réserve de la détermination par les Parties de telles limites d'émission. »

74. Il a en outre été demandé à la Banque de modifier le paragraphe 7 de l'accord (le paragraphe sur la « souplesse ») pour refléter la disposition de la décision 46/37, en notant que cela permettrait d'accroître la « souplesse », par rapport au texte actuel du paragraphe 7.

75. Les amendent susmentionnés ainsi que d'autres amendements nécessaires, ont été inclus dans une « version modifiée et annotée » de l'accord transmise par voie électronique à la Banque mondiale. Les paragraphes modifiés sont les suivants :

- « Le Pays réduira les émissions résiduelles associées aux utilisations comme agents de transformation dans la fabrication de polyéthylène de chlorosulfonate au cours de la Phase I du plan sectoriel sur le CTC, ainsi que de polypropylène chloré et d'acétate d'éthène-vinyle chloré dont il est question dans la phase II du plan sectoriel sur le CTC à des niveaux auxquels pourraient éventuellement convenir les Parties, sans demander d'assistance financière supplémentaire au Fonds multilatéral; et l'Accord entre en vigueur sous réserve de la détermination par les Parties des niveaux d'émission maximums pour les utilisations comme agents de transformation par les pays visés à l'article 5;

- Si lors de la mise en oeuvre de la Phase II du plan sectoriel sur le CTC, ou à n'importe quel moment par la suite, la Chine découvre des utilisations, les tonnes de CTC et/ou les usages de CTC (y compris de nouvelles catégories d'agents de transformation) de CTC non explicitement couverts par la phase II du plan sectoriel d'élimination de CTC, la Chine s'engage à les éliminer en respectant le calendrier d'élimination compris dans le présent Accord, sans coût supplémentaire pour le Fonds multilatéral.

- Bien que le financement ait été établi à partir des estimations des besoins du pays qui permettraient à celui-ci de respecter ses obligations en vertu de l'accord, le Comité exécutif accepte d'accorder au pays la souplesse nécessaire pour réaffecter une partie ou la totalité du montant consenti, selon la situation qui prévaut, afin de réaliser les objectifs

établis dans le présent accord. Les réaffectations considérées comme des changements majeurs doivent être documentées à l'avance dans le prochain programme annuel de mise en œuvre et doivent recevoir l'aval du Comité exécutif comme décrit à l'alinéa 5 (d). Les réaffectations qui ne sont pas considérées comme des changements majeurs peuvent être intégrées au programme annuel de mise en œuvre en cours d'exécution au moment où elles sont rapportées et communiquées au Comité exécutif dans le rapport sur la mise en œuvre du programme annuel. »

Programme annuel de travail pour 2006

76. Les objectifs du programme annuel de travail pour 2006 devront être révisés, pour assurer la cohérence avec les changements proposés au projet d'accord et examinés plus haut. Ils devront couvrir les Phases I et II et seront présentés suivant le modèle ci-dessous.

Objectifs et financement du programme annuel pour 2006
(Phases I et II combinées)

Consommation maximum admissible	
CTC pour 25 applications d'agents de transformation (Phase I)	
2006	493 tonnes PAO
CTC pour 31 applications d'agents de transformation (Phase II)	
2006	6 945 tonnes PAO
Total	7 438 tonnes PAO
Consommation maximum admissible de CFC-113 utilisé comme agent de transformation	
2006	10,8 tonnes PAO
Production maximum admissible	
CTC	
Matières premières pour le CFC	21 276 tonnes PAO
Utilisations règlementées	7 342 tonnes PAO
Total	28 618 tonnes PAO
Tranche 2006 (Phase I)	16 millions $US
Tranche 2006 (Phase II)*	25 millions $US
Total	41 millions $US

* Y compris les 15 millions décaissés à la 47e réunion

77. Le niveau de financement de 15 millions $US demandé dans la fiche des données du programme annuel devra être corrigé et remplacé par 10 millions $US, étant donné que le financement total de la tranche de 2006 sera 25 millions $US, y compris les 15 millions $US déjà décaissés à la 47e réunion.

RECOMMANDATION

78. En attente

PLAN SECTORIEL POUR L'ÉLIMINATION DE LA PRODUCTION DE CFC: PROGRAMME ANNUEL POUR 2006 ET RAPPORT DE VÉRIFICATION DE 2005

DESCRIPTION DU PROJET

79. Conformément à l'arrangement en vertu de l'Accord pour plan sectoriel de la production de CFC en Chine, la Banque mondiale a présenté le programme annuel pour l'élimination du secteur de la production de CFC en Chine à la 47e réunion en novembre 2005. Le Comité exécutif a décidé « d'approuver le programme de travail annuel pour 2006 du programme de cessation de la production de CFC en Chine, en prenant note que la demande de financement, incluant les coûts d'appui, serait soumise par la Banque mondiale à la 48e réunion, avec un rapport de vérification de la mise en œuvre du programme annuel de 2005. »

80. Suite à cette demande, la Banque mondiale présente à la 48e réunion le rapport de vérification de la mise en œuvre du programme d'élimination de la production de CFC en Chine pour 2005 (rapport joint sans la partie consacrée aux données). Ce rapport contient la vérification des six usines de CFC restantes (sur 36 au départ) qui ont poursuivi la production suivant le système des quotas du programme annuel de 2005; ces usines sont identifiées dans le rapport de vérification de SRIC par les numéros suivants : A8, A10, B11, B8, B12 et B14.

81. La vérification a été menée en février 2006 par une équipe de trois, conduite par M. Vogelsberg, un consultant qui a effectué les vérifications des usines de CFC en Chine pour le compte de la Banque mondiale au cours des six dernières années. Le rapport contient un résumé des conclusions et trois annexes. Le résumé des conclusions comporte une évaluation générale par l'équipe de vérification, de l'efficacité du programme de travail de 2005 en ce qui concerne la réalisation des objectifs établis dans l'Accord; il contient aussi les données globales sur la production totale de CFC, la répartition par substances : CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, CFC-13, ainsi que la consommation totale des matières premières. L'évaluation générale de la vérification conclut que la Chine a respecté l'objectif annuel de production de CFC pour 2005 stipulé dans l'Accord, avec une production totale réelle de 18 720,48 tonnes PAO, par rapport à l'objectif de 18 750 tonnes PAO établi dans l'Accord.

82. L'Annexe I contient une description usine par usine du processus de vérification, ainsi qu'une analyse des conclusions. L'Évaluation commence avec une observation sur les changements qui ont pu, ou qui n'ont pas pu être introduits dans l'usine depuis la dernière visite de l'équipe, et se poursuit avec une évaluation de la qualité de la tenue des registres de l'usine. Elle décrit les types de registres consultés pour la vérification, ainsi que la pertinence de ces registres pour l'exercice de vérification. L'équipe a suivi le processus de production ainsi que les traces, à travers les registres, du mouvement des matières premières de CTC et HF utilisées dans les unités de production de CFC, le transfert des produits finis du réservoir journalier vers la zone d'emballage, et ensuite le transfert des produits finis emballés dans des conteneurs vers les entrepôts de vente. Ce processus impliquait la collecte des données et la présentation en tableaux des données journalières, mensuelles et annuelles. Les données de la vérification financière, qui

était menée en même temps, ont permis de faire un recoupement. Le document contenait une analyse des questions identifiées par l'équipe de vérification au cours de la visite. La conclusion de la vérification de chaque usine comporte une évaluation du respect par l'entreprise, des quotas de production attribués par State Environmental Protection Agency.

83. Il n'y a pas eu de cessation totale en 2005, et les six usines qui produisaient en 2004, ont poursuivi leur production en 2005, mais à un niveau inférieur aux quotas obligatoires de contrôle.

84. L'Annexe II présente les résultats selon le modèle de présentation approuvé par le Comité exécutif et couvre les données par mois, sur la capacité de production, la gamme des produits, le quota de production et la production réelle de CFC, le ratio de consommation de matières premières et les variations de stocks des matières premières, ainsi que le nombre de jours de production. Des données comparatives sur ces paramètres depuis le début du programme d'élimination ont été fournies pour faciliter une vérification de la cohérence.

85. L'Annexe III contient les résultats de l'audit financier présentés par l'expert financier de l'équipe de vérification. L'audit financier porte essentiellement sur la vérification des données de production de CFC extraites des registres financiers notamment, les données sur les achats, la consommation des matières premières et les ventes. Le rapport fournit aussi les résultats de l'audit sur la consommation de CFC et de HF, et sur la production de CFC usine par usine.

OBSERVATIONS ET RECOMMANDATION DU SECRÉTARIAT

OBSERVATIONS

Évaluation générale de la vérification de 2005 à la lumière des lignes directrices pour la vérification de l'élimination de la production des SAO

86. La vérification de la mise en oeuvre du programme de travail de 2005 a été effectuée par la même équipe qui a entrepris ce même exercice au cours des quelques dernières années. Le travail a été mené conformément aux lignes directrices et à la méthodologie approuvées par le Comité exécutif. Les résultats de la vérification sont présentés suivant les modèles de présentation approuvés, et sont étayés par une documentation appropriée qui permet de retracer et de confirmer la production de CFC, ainsi que la consommation des matières premières, le HF et le CTC notamment.

Respect du calendrier de contrôle du Protocole de Montréal pour le CFC-13

87. Il a été confirmé par l'équipe de vérification que la production de CFC-13 de la Chine en 2005 était de 20, 292 tonnes PAO, volume qui est inférieur au quota annuel de 20,35 tonnes PAO attribué par la State Environmental Protection Agency, et inférieur à la production maximum admissible de 21, 3 tonnes PAO, établi par le calendrier du Protocole de Montréal en ce qui concerne le contrôle de la production de CFC-13.

88. Conformément à la pratique antérieure en ce qui concerne la communication au Comité exécutif de l'information sur la vérification de l'élimination de la production des SAO, le Secrétariat n'a pas annexé la partie du document consacrée aux données et contenue dans l'Annexe II du rapport de vérification. Ces données peuvent toutefois être disponibles pour tout membre du Comité qui en ferait la demande.

RECOMMANDATION

89. À la lumière du rapport de vérification satisfaisant sur la réalisation par la Chine de l'objectif de réduction de la production de CFC tel qu'établi dans l'accord sur le secteur de la production de CFC pour 2005, le Secrétariat recommande au Comité exécutif de libérer le montant de 13 millions $US pour la mise en œuvre du programme de travail pour 2006 de l'accord sur le secteur de la production de CFC en Chine, plus 975 000 $US de coûts d'appui pour la Banque mondiale.

SECTOR PLAN FOR CFC PRODUCTION PHASE-OUT: 2006 ANNUAL PROGRAMME AND 2005 VERIFICATION REPORT

PROJECT DESCRIPTION

79. According to the arrangement under the Agreement for the China CFC production sector plan, the World Bank submitted the 2006 annual programme for the CFC production sector phase-out in China to the 47th Meeting in November 2005. The Executive Committee decided "to approve the 2006 work programme of the China CFC production closure programme, noting that the request for funding and support cost would be submitted to the 48th Meeting by the World Bank, with a verification report on the implementation of the 2005 annual programme" (decision 47/28).

80. As requested, the World Bank is submitting to the 48th Meeting the verification report on the implementation of the 2005 China CFC production phase-out programme (attached without the data part), which contains the verification of the 6 remaining CFC plants (from the original 36) that were producing under the quota system in the 2005 annual programme (identified by the SRIC audit report numbers as A8, A10, B11, B8, B12, and B14).

81. The verification was conducted by a team of three in February 2006 headed by Mr. Vogelsberg, a consultant who had been carrying out verifications of the CFC plants in China on behalf of the World Bank for the past 6 years. The report contains a summary of conclusions and 3 annexes. The summary of the conclusions provides the overall assessment of the verification team on the performance of 2005 work programme in achieving the targets set in the Agreement and the aggregate data on the total CFC production, the breakdown into the different substances of CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, CFC-13, and the overall consumption of feedstock. The overall assessment of the verification concludes that China complied with the annual CFC production target set out in the Agreement for the year 2005, with the total actual production of CFCs at 18,720.48 ODP tonnes against the 18,750 ODP tonnes set in the Agreement.

82. Annex I contains a description on a plant-by-plant basis of the verification process and a discussion of the findings. It starts with an observation of the changes that may or may not have been introduced to the plant since the last visit of the team and continues with an assessment on the quality of record-keeping in the plant. It describes the types of records that were used to conduct the verification and the relevance of these records to the verification exercise. The team followed the production process and checked the paper trail on the movement of the raw materials CTC and HF to the CFC production units, the transfer of finished products from the day tank to the packaging area and then the transfer of the packaged product in containers to the sales warehouse. This process involved the collection and tabulation of the daily, monthly and yearly data. There was a cross check using the data from the financial audit which proceeded simultaneously. The document contained a discussion of the issues that the verification team identified during the visit. The conclusion of the verification of each plant consists of an assessment of the compliance of the company with the production quota assigned by SEPA.

83. There was no complete closure in 2005, and the 6 plants which had been producing in 2004 continued their production during 2005 but at a lower level under the control of mandatory quotas.

84. Annex II presents the findings in the format approved by the Executive Committee and covers data by month on production capacity, product mix, production quota and actual CFC production, feedstock consumption ratio and inventory changes in feedstock, and the number of days in production. Comparative data on these parameters since the beginning of the phase-out programme has been provided to facilitate a check on consistency.

85. Annex III contains the financial audit results presented by the financial specialist in the verification team. The focus of the audit is the verification of CFC production obtained from the examination of financial records such as on the procurement, consumption of raw materials and sales. The report provides the audited results of CTC and HF consumption and CFC production plant by plant.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Overall assessment of the 2005 verification in light of the guidelines for verification of ODS production phase-out

86. The verification of the implementation of the 2005 work programme was carried out by the same team which had been conducting the same exercise for the past several years. The exercise was carried out in accordance with the guidelines and methodology approved by the Executive Committee. The results of the verification are presented in line with the approved formats, and are supported by adequate documentation which enables tracking and validation of CFC production, and the consumption of feedstock of HF and CTC.

Compliance with the Montreal Protocol control schedule for CFC-13

87. It has been confirmed by the verification team that China's production of CFC-13 in 2005 was 20.292 ODP tonnes, which is below the annual quota assigned by SEPA of 20.35 ODP tonnes and is under the 21.3 ODP tonnes of maximum allowable production under the Montreal Protocol control schedule for CFC-13 production.

88. The Secretariat, in accordance with previous practice of furnishing information to the Executive Committee on verification of ODS production phase-out, is not including in the submission the data part in Annex II of the verification report. The data can, however, be made available to any member of the Committee upon request.

RECOMMENDATION

89. The Secretariat recommends that, in light of satisfactory verification that China has achieved the CFC production reduction target as established in the CFC production sector agreement for the year 2005, the Executive Committee releases to the World Bank US $13 million for the implementation of the 2006 work programme of the China CFC production sector agreement, as well as US $975,000 as support cost for the World Bank.

2005 SUMMARY VERIFICATION REPORT

FOR

THE CTC/PA SECTOR PLAN: PHASE I

WORLD BANK

WASHINGTON, D.C., USA

FEBRUARY 2006

1. Introduction

As required by the agreement between China and the Executive Committee of the Multilateral Fund for Phase I of the CTC/PA Sector Plan, China's annual production and consumption of CTC and consumption of CFC-113 must be verified independently by the World Bank. This report provides a summary of the verification of the 2005 production/consumption of these ozone depleting substances, including consumption in the 25 process agent applications covered by the agreement.

Consistent with the requirements, the World Bank appointed independent verification teams for the CTC production verification and for the verification of consumption of the PA companies covered by the Agreement. The CTC verification team consisted of two international technical experts and one local financial expert from China. The PA verification team consisted of one international technical expert. The guidelines for CTC production verification and PA consumption verification followed those in 2004 verification. The CTC Production Verification Report and the PA Consumption Verification Report have been submitted separately.

2. Conclusion

The two teams were able to verify that overall production of CTC and consumption of CTC and CFC-113 were within the limits set by the agreement between China and the ExCom. Details appear in Table 1 below.

Table 1: CTC production and consumption in ODP tonnes

Year	CTC production* (Row 1 of the agreement)		Use of CTC for CFC feedstock consumption (Row 2 of the agreement		Use of CTC for the 25 PA applications (Row 4 of the agreement)		Use of CFC-113 for 25 PA applications (Row 5 of the agreement)	
	Allowed	Verified	Allowed	Verified	Allowed	Verified	Allowed	Verified
Base	86,280	N/A	N/A	N/A	3,825	N/A	17.2	N/A
2001	64,152	N/A	55,139	NA	4,347	N/A	17.2	N/A
2002	64,152	N/A	45,400	NA	5,049	N/A	17.2	N/A
2003	61,514	59,860	45,333	39,839	5,049	3,080	17.2	17.1
2004	54,857	50,195	39,306	34,168	5,049	3,886	14	10.8
2005	**38,686**	**33,080.17**	**28,446**	**25,811.30**	**493**	**485.02**	**14**	**3.2**
2006	32,044		21,276		493		10.8	
2007	26,457		15,129		493		8.4	
2008	23,583		11,662		493		0	
2009	17,592		5,042		493		0	
2010	11,990		0		220		0	

3. CTC production verification

The verification team audited each of the 9 CTC producers presently producing CTC in China and the two CTC distillation plants. CTC production in 2005 was confirmed as **33,080.17 ODP tonnes**. The detailed production and raw material figures are reported in the Annexes to the CTC Production Verification Report.

SEPA reported that a total of 14,296.84 ODP tonnes CTC was consumed as feedstock for non-ODS chemicals. Consumption by newly identified process agent applications included in the tentative list of PA adopted by the Parties at its 17th meeting.is teated as feedstock until confirmed at the 19th meeting. 146.29 ODP tonnes CTC was destroyed by incineration in 2005. Complying with provisions of the Montreal Protocol, the gross 2005 CTC production was therefore reduced by (14,296.84 + 146.29) ODP tonnes. The 2005 CTC production as per the Agreement was confirmed as 33,080.17 ODP tonnes.

Table 2: Summary of quotas issued by SEPA and actual verified CTC production in 2005

Name of CTC producer		2005 CTC Production Quota (MT)	2005 CTC Production (MT)	Comments
CTC 1	Luzhou North Chemical Co. , Ltd.	2,106.00	2,098.63	
CTC 2	Zhejiang Juhua Fluoro-chemical Co., Ltd.	13,604.00	14,951.88	
CTC 3	Liaoning Panjing No. 3 Chemical Plant	0	0	Plant Closed.
CTC 4	Chongqing Tianxuan Chemical Co., Ltd.	0	0	Plant Closed Dec. 26, 2003
CTC 6	Chongqing Tianyuan Chemical General Plant	0	0	Plant Closed April 16, 2004.
CTC 7	Taiyuan Chemical Industrial Co., Ltd.	0	0	Plant Closed
CTC 8	Luzhou Xinfu Chemical Industry Co., Ltd.	717.00	705.54	Plant Closed
CTC 9	Jiangsu Meilan Chemical Co., Ltd.	2,303.00	4,320.08	One production line put into operation in 2005 to convert CTC into CM1.
CTC 10	Guangzhou Hoton Chemical (Group) Co., Ltd.	0	0	Plant closed
CTC 11	Sichuan Honghe Fine Chemical Co., Ltd.	5,668.00	5,767.154	
CTC 12	Shanghai Chlor-Alkali	6,609.00	7,211.10	
CTC 14	Wuxi Greenapple Chemical Co., Ltd.	1,000.00	999.74	
CTC 15	Shandong Jinling Group Co., Ltd.	1,100.00	4,198.12	Two new CMs line put into production in 2005.
CTC 16	Shandong Dongyue Fluoro-Silicon Material Co., Ltd.	1,461.00	2,350.20	
CTC 5	Chongqing Tiansheng Chemical Co., Ltd.	5.00	5.00	CTC residue distillation plant
CTC 13	Quzhou Jiuzhou Chemical Co., Ltd.	596.00	595.56	CTC residue distillation plant

Gross 2005 CTC production in China	**35,169.00 MT**	**43,203.00 MT (47,523.30 ODP tonnes)**	
Used as feedstock for non-ODS chemicals		12,997.13 MT (14,296.84 ODP tonnes)	SEPA reported
Destroyed by incineration		132.99 MT (146.29 ODP tonnes)	SEPA reported
2005 CTC Production as per the Agreement		**30,072.88 MT (33,080.17 ODP tonnes)**	Gross production – non-ODS feedstock uses – destroyed amount
Agreement Limit on 2005 CTC Production in China		**38,686.00 ODP tonnes**	

4. CTC used by CFC producers

The CTC used by the CFC producers was verified as part of the CFC verification. The CFC verification report was submitted to the 48th meeting of the ExCom for consideration.

Table 3: 2005 CTC consumed by CFC producers

	CTC consumption (in MT)
Jiangsu Meilan Chemical Co., Ltd.	1,745.43
Zhejiang Juhua Fluorochemical Co., Ltd.	9,475.38
Zhejiang Dongyang Chemical Plant	1,267.93
Jiangsu Changsu 3F Refrigerant Co. LTD	10,976.08
Total in MT	23,464.82
Total in ODP tones	25,811.30

5. Companies using CTC for non-ODS production

China has a number of non-ODS feedstock users. In order to allow monitoring of the total production as defined by the MP, the companies and users of CTC for non-ODS feedstock applications have been included in the overall CTC verification. The total consumption of CTC for non-ODS production is found and confirmed by SEPA 14,296.84 ODP tonnes. This amount includes some newly identified PA applications listed but not yet confirmed by TEAP. Consistent with the provisions of the Montreal Protocol, the CTC production total are therefore reduced by 14,296.84 ODP tons for non-ODS feedstock applications.

More feedstock applications and companies might be identified and confirmed through the work presently undertaken by SEPA for the implementation of the CTC/PA Sector Plan (Phase I and II). As the list of companies and their production is commercially sensitive, the list is not included here but is available to the Secretariat for internal review if so requested.

6. CTC and CFC-113 used as process agent for the applications covered by Phase I

A total of 6 production lines at 5 companies were verified. The verification included CTC and CFC-113 procurement records and was checked against the quantities of the products produced by the companies and the historical ratio from the PA sector plan on CTC consumption per tonnes of the product produced.

Table 4: Enterprises using CTC as process agent in 2005 (25 PA applications)

Enterprises using CTC as process agent	CTC consumption quota (MT)	CTC opening stock (MT)	CTC purchase (MT)	CTC uses as PA (MT)	CTC closing stock (MT)
1. Shanghai Chlor-Alkali Chemical Co., Ltd. (Shanghai Dihe Chem. Plant)	85.00	103.52	83.12	138.99	47.65
2. Jiangyin Fasten Fine Chemical Co. Ltd.	65.00	585.45	64.38	191.84	457.99
3. Fujian Wantaixing Chem. Development Co., Ltd.	63.00	81.39	63.00	104.25	40.14
4. Jilin Chemical Industrial Co. Ltd.	230.00	1080.00	230.43	832.79	477.64
Total in MT	**443.00**	**1,850.36**	**440.93**	**1,267.87**	**1023.42**
Total in ODP tonnes	**487.30**	**2,035.40**	**485.02**	**1,394.65**	**1,125.77**

Table 5: Enterprises using CFC-113 as process agent in 2005 (25 PA applications)

Enterprises using CFC-113 as process agent	2005 Quota (MT)	Opening stock (MT)	Purchase (MT)	Used as PA (MT)	Closing stock (MT)
5. Jinan 3F Fluoro-Chemical Co. Ltd.	4.50	0.00	4.00	4.00	0.00
Total in MT	**4.50**	**0.00**	**4.00**	**4.00**	**0.00**
Total in ODP tonnes	**3.60**	**0.00**	**3.20**	**3.20**	**0.00**

7. CTC import and export

China did not import any CTC and exported 4.75 tons CTC in 2005.

8. National production and consumption

Based on the verification carried out and information provided by SEPA, national CTC consumption and production are shown in the table below.

Table 6: National CTC production

CTC Production	(ODP tonnes)
Gross CTC production in 2005	**47,523.30**
CTC used as feedstock for non-ODS chemicals	-14,296.84
CTC destroyed by technologies approved by the Parties	-146.29
CTC production as per the Agreement in 2005	**33,080.17**
Used as feedstock for CFC production	-25,811.30
National CTC production as per the Montreal Protocol	**7,268.87**

In addition to 485.02 ODP tons use for PA ! and 5,233.00 ODP tons used for PA II , 575.31 ODP tons was used for laboratory uses. The difference between the actual CTC production and the known CTC consumption was 975.54 ODP tons. This is a significant reduction compared to the previous years and shows that the sales licensing system is working.

Table 7: National CTC consumption

CTC Production and Consumption	(ODP tonnes)	MP Baseline
CTC production as per the Montreal Protocol	7,268.87	29,367.4
Import of CTC	0	
Export of CTC	5.23	
CTC consumption as per the Montreal Protocol	7,263.64	55,903.8

Table 8: Montreal Protocol Requirement and National Production and Consumption.

	Production (ODP tonnes)	Consumption (ODP tonnes)
Montreal Protocol Baseline	29,367.4	55,903.8
Montreal Protocol limit in 2005 (85% of baseline)	7,341.85***	8,385.57
Actual CTC production and consumption in 2005	7,268.87	7,263.64

*** The allowed CTC production for consumption include the additional production of 10% of base level allowed for basic domestic need from 2005 to 2009 and 15% from 2010.

CHINA PROCESS AGENT SECTOR PLAN

PHASE I

2005 CTC Production Verification Report

The World Bank

February 2006

I. Summary

The CTC Verification Team verified, using the World Bank's Terms of Reference (TOR) as guidance, the production of each of the nine CTC producers and two CTC residue distillation plants presently producing in China. It was confirmed by the verification and included in the summary report that the 2005 CTC production in China was **37,931.52 ODP tonnes CTC**, which was below the ExCom/China agreed amount of **38,686.00 ODP tonnes CTC** and below the SEPA issued quota of **38,686.00 ODP tonnes CTC**.

In conclusion, the Verification Team confirmed that each producer with six exceptions had produced within the production quotas assigned to them by SEPA. Of the six exceptions, five companies (CTC 02, CTC 11, CTC 12, CTC 15 and CTC 16) claimed that the over-produced CTC was sold to non-ODS feedstock consumers or destroyed by incineration. One company (CTC 09) claimed that it had used its overquota produced CTC as a feedstock to produce methyl chloride (CM1). The conversion is based on newly developed in house technology.

Also, the Verification Team confirmed that, in 2005, one dedicated CTC producer (CTC 08) and one CTC residue distillation plant (CTC 05) were closed and completely dismantled. However, in the same period three new chloromethanes production lines were installed and commissioned within two existing CMs producer's plants (CTC 11 and CTC 15). This added a new CMs capacity totaling 120,000 MT/a, of which co-produced CTC was in the amount of 3,600 MT to 6,000 MT/a (3 to 5% of the CMs total).

The summary of each plant's verified production and assigned quota is found in Table 1 below. The detailed production, raw material, financial figures and the pictures of two dismantled plants are included in the ANNEXES (available upon request) to the summary report .

Table1: Summary of quotas issued by SEPA and verified CTC production in 2005

Sector Plan #	Name of CTC producer	2005 CTC Production Quota, MT	Verified CTC Production in 2005, MT	Comments
CTC 01	Luzhou North Chem. Industries Co., Ltd.	2,106.00	2,098.63	
CTC 02	Zhejiang Juhua Fluorochemical Co., Ltd.	13,604.00	14,951.88	Plant claimed that 1,353.01 MT was sold to non-ODS feedstock consumers.
CTC 03	Liaoning Panjing No. 3 Chemical Plant	0.00	0.00	Plant closed in 2001.
CTC 04	Chongqing Tianxuan Chemical Co., Ltd.	0.00	0.00	Plant closed December 26, 2003.
CTC 06	Chongqing Tianyuan Chem General Plant	0.00	0.00	Plant closed April 16, 2004.
CTC 07	Taiyuan Chemical Industrial Co., Ltd.	0.00	0.00	Plant closed in 1998.
CTC 08	Luzhou Xinfu Chemical Industry Co., Ltd.	717.00	705.54	Production line closed July 2005 and dismantled January 2006
CTC 09	Jiangsu Meilan Chemical Co., Ltd.	2,303.00	4,320.08	2,281.02 MT sent to CTC conversion facility for converting to CM1.
CTC 10	Guangzhou Hoton Chem (Group) Co., Ltd.	0.00	0.00	Plant closed in 1997.
CTC 11	Sichuan Honghe Fine Chemical Co., Ltd.	5,668.00	5,767.15	One new CMs line (40,000 MT/a) was installed and commissioned in 2005. The plant claimed that 101.50 MT of CTC was sold to non-ODS feedstock consumers.
CTC 12	Shanghai Chlor-Alkali Chemical Co., Ltd.	6,609.00	7,211.10	Plant claimed that 674.61 MT was sold to non-ODS feedstock consumers.
CTC 14	Wuxi Greenapple Chemical Co., Ltd.	1,000.00	999.74	
CTC 15	Shandong Jinling Chemical Group Company	1,100.00	4,198.12	Two new CMs lines were installed in 2005 adding an annual capacity of 80,000 MT to its existing capacity of 40,000 MT (120,000 MT total). The plant claimed that 3,100.98 MT of CTC was sold to non-ODS feedstock consumers.
CTC 16	Shandong Dongyue Fluoro-Silicon Material Co., Ltd.	1,461.00	2,350.20	132.99 MT sent to incinerator for destruction and 1.9 MT sent for pilot tests of NH4Cl conversion technology. Besides, the plant claimed that 843.82 MT CTC was sold to non-ODS feedstock users.
CTC MT Subtotal Production		**34,568.00**	**42,602.44**	
CTC 05	Chongqing Tiansheng Chemical Co., Ltd.	5.00	5.00	CTC residue distillation plant. The plant stopped distillation on August 6, 2005 and dismantled the facility on January 27, 2006.
CTC 13	Quzhou Jiuzhou Chemical Co., Ltd.	596.00	595.56	CTC residue distillation plant.
CTC MT Subtotal by Distillation		**601.00**	**600.56**	
2005 CTC Total Production in China		**35,169.00 MT**	**43,203.00 MT**	
2005 CTC Production for Non-ODS Chemicals		**8,586.807 MT**		Reported by SEPA, see Table 2-1
2005 CTC Destruction in China		**132.99 MT**		Reported by SEPA, see Table 2-2
Verified 2005 CTC Production in China		**34,483.20 MT**		**37,931.52 ODP tonnes**
Agreement Limit on 2005 CTC Production in China		**35,169.09 MT**		**38,686.00 ODP tonnes**

II. Companies using CTC for non-ODS production

SEPA reported that China had non-ODS feedstock users consuming 8,586.807 MT CTC in the year of 2005. This amount of CTC non-ODS feedstock consumption includes some newly identified CTC feedstock applications and/or PA applications not yet identified and listed by the Parties. SEPA also reported in 2005 that China destroyed 132.99 MT CTC by incineration. The SEPA-reported CTC non-ODS feedstock consumption and destruction have been deducted from the overall CTC production verification total (see Table 1). The CTC Verification Team did not visit any company using CTC as a feedstock for non-ODS chemical production during its 2005 verification. Detailed information confirmed by SEPA is listed in Table 2-1 and Table 2-2 below.

Table 2-1: Use of CTC as feedstock for non-ODS chemical production in 2005 in MT

No.	Non-ODS feedstock applications	CTC purchase in 2005, MT	CTC consumption in 2005, MT	Reported by
1	DV methyl ester	2037.93	1928.14	SEPA
2	Tetrachloride dimethylmethane	853.12	842.852	SEPA
3	2-methyl-3-(trifluoromethyl) aniline	0	0	SEPA
4	HFC-236fa	416.66	400.08	SEPA
5	HFC-245fa	519.876	447.091	SEPA
6	HFC-365mfc	0	0	SEPA
7	4-TFMOA	0	0	SEPA
8	TFMO	65	53.5	SEPA
9	DFTFB	0	0	SEPA
10	Flunarizine Hydrochloride	1.4	2	SEPA
11	Benzophenone	420.24	442.885	SEPA
12	Cinnamic acid	313.25	300.835	SEPA
13	4,4-difluorodiphenyl ketone	253.429	246.38	SEPA
14	3,3,3-trifluoropropene	0	0	SEPA
15	4-trifluoromethoxybenzenamine	281.407	273.795	SEPA
16	Triphenylmethyl chloride	353.61	354.5	SEPA
17	3,4-Difluoro-1-trifluorotoluene	0	0	SEPA
18	1,2-Benzisothiazol-3-Ketone	115	110.1	SEPA
19	astaxanthin	10	1.5	SEPA
20	Trifluoromethoxybenzene	347.1	335.6	SEPA
21	DPGA	18.1	16.2	SEPA
22	Fluorescent bleaching agent intermediate	299.66	265.16	SEPA
23	Methyl chloride (CM1)	2281.025	2281.025	SEPA
	Total in MT	**8586.807**	**8301.643**	

Table 2-2: China CTC destruction in 2005 in MT

No.	Disposal of CTC	Amount of CTC destructed or converted in 2005, MT	Reported by
1	Destroyed by incineration	132.99	SEPA
	Total in MT	**132.99**	

CHINA CTC PRODUCTION PHASE-OUT PROGRAM
2005 VERIFICATION REPORT
February 3, 2006

CTC Verification Team

- Zhiqun Zhang, Team Leader and International Technical Consultant (Canada)
- Wu Ning, Local Financial Analyst (China)
- E. John Wilkinson, International Technical Consultant (USA), attended 01/15/06 – 01/25/06

Assisted and Accompanying by

- Feng Liulei, Project Officer of State Environmental Protection Administration (SEPA), China, attended 01/10/06 - 01/17/06
- Gong Xingming, Project Officer of SEPA, attended 01/18/06 – 01/28/06

Verification Mission Time Frame

The mission began on January 10, 2006 in Beijing and ended in Chongqing on January 28, 2006. In total 11 CTC production enterprises were visited and verified.

Number	Name of Enterprise	Process	Date of visit
CTC 01	Luzhou North Chemical Industrial Co., Ltd.	Methanol-based	Jan. 26, 2006
CTC 02	Zhejiang Juhua Fluorochemical Co., Ltd.	Methanol-based	Jan. 15-16, 2006
CTC 03	Liaoning Panjin No. 3 Chemical Plant	Closed in 2001	Not visited
CTC 04	Chongqing Tianxuan Chemical Co., Ltd.	Closed in 2003	Not visited
CTC 05	Chongqing Tiansheng Chemical Co., Ltd.	Residue distillation	Jan. 27, 2006
CTC 06	Chongqing Tianyuan Chemical General Plant	Closed in 2004	Not visited
CTC 07	Taiyuan Chemical Industrial Co., Ltd	Closed in 1998	Not visited
CTC 08	Luzhou Xinfu Chemical Industry Co., Ltd.	Methane-based	Jan. 25, 2006
CTC 09	Jiangsu Meilan Chemical Co., Ltd.	Methanol-based	Jan. 20-21, 2006
CTC 10	Guangzhou Hoton Chemical Co., Ltd.	Closed in 1997	Not visited
CTC 11	Sichuan Honghe Fine Chemical Co., Ltd.	Methane & Methanol-based	Jan. 23-24, 2006
CTC 12	Shanghai Chlor-Alkali Chemical Co,	Ethylene-Based	Jan. 17, 2006
CTC 13	Quzhou Jiuzhou Chemical Co., Ltd.	Residue Distillation	Jan. 14, 2006
CTC 14	Wuxi Greenapple Chemical Co., Ltd.	Methanol-Based	Jan. 18-19, 2006
CTC 15	Shandong Jinling Chemical Group Company	Methanol-Based	Jan. 11, 2006
CTC 16	Shandong Dongyue Fluoro-Silicon Material Co., Ltd.	Methanol-Based	Jan. 12, 2006

VERIFICATION METHODOLOGY USED FOR EACH PLANT VISITED

The Verification Team attempted to gather the following information from each plant in order to verify their 2005 CTC production:

- plant identification (name, technical audit number, address, contact person and function title, telephone and fax numbers, and email address);
- plant history (date of construction, number of CTC production lines, capacity in baseline year 2001, and production for 2002, 2003, 2004 and 2005);
- plant process clarification and where within the plant process would it be best to collect CTC production data for our verification;
- CTC production quotas received from SEPA for 2005;
- daily CTC production logs and CTC product transfer records;
- daily and monthly CTC storage inventory; and
- CTC packaged for sales verified from daily movement records of CTC out of the product warehouse.

Secondary information was also gathered in order to support the CTC production data:

- chlorine (Cl_2) consumption from daily shift transfer records and opening and closing stocks from monthly production inventory;
- organic raw material methane (CH_4), methanol (CH_3OH) and ethylene (C_2H_4) supply from daily transfer records;
- organics consumption from daily shift transfer records and monthly opening and closing stocks inventory;
- CTC's co-product's [methyl chloride (CM1), methylene chloride (CM2), chloroform (CM3), and perchloroethylene (PCE)] production in metric tones;
- CTC output ratios and raw material consumption ratios were calculated for CTC/ CMs, CTC/ (PCE+CTC), Cl_2/CTC, CH_4/CTC, CH_3OH/CTC, and C_2H_4/CTC. The Enterprise's annual average ratio was compared with the theoretical value in order to determine whether or not the values varied within a reasonable range and generally slightly above the theoretical value.

Concurrently, a financial verification was conducted by reviewing and checking:

- the accounting system's reliability;
- the financial records related to raw material purchase, storage and transfer;
- the accounting records of CTC production, transfer and sales;

- the track number from the accounting records traced back to the original documents; and
- all inconsistencies between financial records were asked to be clarified.

Once all of the above was completed, the Verification Team would conduct a cross check on the verification results from both the production side and the financial side to ensure the data consistency and determine whether or not the Enterprise's 2005 CTC production data were verified. If there were any irresolvable data differences between the financial analysis and the production verifications, the Team reported the production data. The Team also explained, if possible, the differences in the financial analysis ANNEX II (available upon request).

CHINA PROCESS AGENT SECTOR PLAN

PHASE I

2005 CTC and CFC-113 Consumption

Verification Report

The World Bank

February 2006

SUMMARY

Under the Agreement between China and the Executive Committee of Multilateral Fund for the Process Agent Sector (Phase I), China was required to limit its CTC consumption to 493 ODP tonnes and its CFC-113 to 14 ODP tonnes in the year of 2005.

As guided by the World Bank's Terms of Reference (TOR) for February 2006 PA I consumption verification, the PA Verification Team verified the consumption of CTC and CFC-113 at each of the five enterprises (see Table 1 below) presently running in China that use CTC and CFC-113 as a process agent for the applications covered by CTC/PA Sector Plan (Phase I).

In accordance with the CTC/PA Sector (Phase I) 2005 annual program, the verification included CTC and CFC-113 procurement, consumption and stockpile records and was checked against the quantities of the products that use CTC and CFC-113 as process agent and the historical ratios on CTC and CFC-113 consumption per ton of the product produced.

It was confirmed by the verification and included in the summary report that the verified 2005 CTC and CFC-113 purchases in the PA Sector (Phase I) were **488.22 ODP tonnes**[1], which were below the ExCom/China agreed limit of **507.00 ODP tonnes**[2].

1 ***CTC purchase and consumption:*** The verified CTC purchase and consumption in 2005 was 485.02 ODP tonnes and 1,394.65 ODP tonnes respectively, of which 909.63 ODP tonnes CTC was consumed from the 2004 stockpile while the 485.02 ODP tonnes of CTC purchase was below the 2005 maximum allowable CTC consumption (493.00 ODP tonnes) in the PA sector.

2 ***CFC-113 purchase and consumption:*** The verified CFC-113 purchase and consumption in 2005 was 3.20 ODP tonnes and 3.20 ODP tonnes respectively, which was below the 2005 maximum allowable CFC-113 consumption (14.00 ODP tonnes) in the PA Sector.

In conclusion, the Verification Team confirmed that all enterprises with one exception had purchased CTC and CFC-113 within the PA consumption quotas they received from SEPA. The exceptional company (CSM #51) made an extra purchase of 35.43 MT CTC in October 2005 but only returned 35.00 MT CTC back to the supplier in December 2005, which caused the 430 kg of CTC over-quota procurement.

Also, the Verification Team confirmed that, in 2005, the trial production and equipment modification of new CSM line established in Jilin Chemical (December 2004) had been unsuccessful. Even though a great effort was made by the plant with technical supports from Hong Kong supplier, the imported key equipment (i.e. the solvent stripping and

[1] Including 485.02.00 ODP tonnes of CTC and 3.20 ODP tonnes of CFC-113, see Table 2 of the summary report.
[2] Including 493.00 ODP tonnes of CTC and 14.00 ODP tonnes of CFC-113, see UNEP/OzL.Pro/ExCom/38/70/Rev.1 Annex XIII.

double-screw dry extrusion system) has been in malfunction. Throughout the year of 2005, the new line's reaction system was integrated with the old line's product separation & CTC recovery system[3] for joint producing CSM, and CTC consumption ratios still remained high.

The summary of each enterprise's CTC and CFC-113 purchase, consumption and stockpile in 2005 is found in Table 2 below. The detailed figures and products that use CTC and CFC-113 as process agent are included in Annex I to the summary report.

Table 1 Summary of verified CTC and CFC-113 consumptions in 2005

Sector Plan #	Application	ODS PA	Name of Enterprise using ODS PA	PA 2005 opening stock (MT)	PA 2005 purchase (MT)	PA 2005 use (MT)	PA 2005 closing stock (MT)
1	CR	CTC	Shanghai Chlor-Alkali Chemical Co. Ltd.	103.52	83.12	138.99	47.65
5	CR	CTC	Jiangsu Fasten Fine Chemical Co. Ltd.	585.45	64.38	191.84	457.99
N/A	CR	CTC	Fujian Wantaixing Chem. Development Co. Ltd.	81.39	63.00	104.25	40.14
51	CSM	CTC	Jilin Chemical Industrial Co. Ltd.	1,080.00	230.43	832.79	477.64
Sub-total of CTC PA 2005 use in MT (Figures in brackets are ODP tonnes)				**1,850.36** (2,035.40)	**440.93** (485.02)	**1,267.87** (1,394.65)	**1,023.42** (1,125.77)
167	PTFE	CFC-113	Jinan 3F Fluoro-Chemical Co. Ltd.	0.00	4.00	4.00	0.00
Sub-total of CFC-113 PA 2005 use in MT (Figures in brackets are ODP tonnes)				**0.00** 0.00	**4.00** (3.20)	**4.00** (3.20)	**0.00** 0.00
Total ODS PA 2005 uses in ODS tonnes				**2,035.40**	**488.22**	**1,397.85**	**1,125.77**

[3] All CSM reaction product mixtures were delivered from the new line reaction system and sent directly by pipeline to the old line rear treatment system for CTC recovery and CSM separation, drying and packaging.

CHINA PROCESS AGENT SECTOR PLAN (PHASE I)

2005 CTC AND CFC-113 CONSUMPTION VERIFICATION REPORT

February 23, 2006

PA Verification Team

- Zhiqun Zhang, International Technical Consultant (Canada), the World Bank.

Assisted and Accompanying by

- Feng Liulei, Project Officer of State Environmental Protection Administration (SEPA), China.

Verification Time Frame

The verification mission began on February 9, 2006 in Beijing and ended in Jiangsu on February 20, 2006. In total fine (5) PA enterprises were visited and verified. Baseline information and the verification schedule are tabulated below:

Table 2 Baseline information and PA enterprises visited

Sector Plan #	Name of Enterprise Using ODS PA	Baseline (Ave. 1998-2000)		Date of Visiting
		ODS PA	MT	
Chlorinated Rubber (CR)				
1	Shanghai Chlor-Alkali Chemical Co., Ltd. (Shanghai Dihe Chemical Plant)	CTC	109	Feb 10, 2006
5	Jiangsu Fasten Fine Chemical Co. Ltd	CTC	178	Feb 19, 2006
N/A	Fujian Wantaixing Chem. Development Co. Ltd.	CTC	N/A	Feb 17, 2006
Chlorosulphonated Polyethylene (CSM)				
51	Jilin Chemical Industrial Co. Ltd	CTC	878	Feb 10-11, 2006
Polytetrafluoroethylene (PTFE)				
167	Jinan 3F Fluoro-Chemical Co. Ltd.	CFC 113	4	Feb 13, 2006

VERIFICATION METHODOLOGY USED FOR EACH PLANT VISITED

The Verification Team attempted to gather the following information from each plant in order to verify its 2005 CTC and/or CFC-113 consumption:

- Plant identification (name, sector plan number, address, contact person and functional title, telephone and fax numbers, and e-mail address);
- Plant history (date of construction, number of production lines for each CTC and/or CFC-113 application, and their capacities in the baseline year 2001 and after);

- Plant activities and process modification related to the verification data collection and ODS PA consumption. Clarifying where within the plant process would it be best to collect CTC and/or CFC-113 consumption data for our verification;
- CTC and/or CFC-113 consumption quotas received from SEPA for 2005;
- CTC and/or CFC-113 purchase orders and daily movement records (from outside to plant warehouse, and from plant warehouse to workshop storage);
- CTC and/or CFC-113 stock inventory, including the amount of CTC and/or CFC-113 remained in plant warehouse and in production system; and
- Monthly CTC or CFC-113 consumption was determined by the following formula:
  PA consumption = PA opening stock + PA purchase – PA closing stock

Secondary information was also gathered in order to support the CTC or CFC-113 consumption data:

- Packaging and movement records of CR, CSM and PTFE from production line to product warehouse;
- Dispatching and movement records of CR, CSM and PTFE out of product warehouse for sales;
- Weekly and monthly inventory records of CR, CSM and PTFE stocks;
- Daily production logs and number of operating days;
- CTC/CR, CTC/CSM or CFC-113/PTFE consumption ratios were calculated for each PA enterprise; and
- Inspecting production line(s), CTC or CFC-113 warehouse and workshop storages, and CR, CSM or PTFE product warehouse.

Concurrently, a financial check was conducted at each plant by reviewing the accounting records and Value-Added Tax (VAT) receipts of all CTC or CFC-113 purchases made in 2005. If there was any discrepancy between the financial record and the production verification, the Team reported the production verification result and, if possible, explained the difference based on the plant visit.

Once all of the above was completed, the PA Verification Team would determine whether or not the enterprise's 2005 CTC or CFC-113 consumption data were verified.

2006 Annual Program for Sector Plan for Phaseout ODS Process Agent Applications (PhaseII) and Corresponding CTC Production in China

2006 ANNUAL PROGRAM

March 7, 2006

Data Sheet

Country	China
Year of plan	2006
# of years completed	0
# of years remaining under the plan	4
Target ODS consumption of the preceding year	n/a
Target ODS consumption of the year of plan	7,438 ODPt-CTC
Target ODS Production of the year of plan	29,661 ODPt-CTC
Level of funding requested	US$ 15,000,000
National Implementing operating agency	State Environment Protection Administration
International implementing agency	The World Bank

Table of Contents

2006 Annual Program for Sector Plan for Phaseout ODS Process Agent Applications (Phasell) and Corresponding CTC Production in China

INTRODUCTION

1. The ExCom meeting in Nov. 2005 has approved in principle a funding level of US$46,500,000 for the implementation of the Sector Plan for Phase out ODS process Agent Application (Phase II) and Corresponding CTC Production in China, and we expect an amount of US$25,000,000 will be allocated for the 2006 annual program.

2. This first Annual Program covers activities in both ODS PA (phase II) consumption and CTC production sectors in 2006. Phaseout activities will start immediately after provision of funding following approval of the Annual Program of 2006.

ANNUAL PHASEOUT TARGETS AND FUNDING LEVEL

3. ***Phaseout obligations.*** The agreed phaseout targets and corresponding funding for this phaseout of the PA and CTC Production sectors is as follows:

Table 1: Allowable CTC Production and Consumption under the CTC/PA (Phase I and II) Sector Plan (ODP tonnes)

	Baseline (2003)	2006	2007	2008	2009	2010	
1. Max allowed CTC production for consumption under the MP	**29,367**	**7,342**	**7,342**	**7,342**	**7,342**	**4,405**	
2. Max allowable CTC consumption as per the Montreal Protocol control measures	**55,900**	**8,385**	**8,385**	**8,385**	**8,385**	**1,214***	
3. Max allowable CTC consumption in CTC/PA (Phase I) sector plan	**5,049**	**493**	**493**	**493**	**493**	**220***	
4. Max allowable CTC consumption in CTC/PA (Phase II) sector plan	5,411	7,892	7,892	7,892	7,892	**994***	
5. Potential new Process Agent Applications	Not Applicable	Not Applicable	Not Applicable	TBD	TBD	TBD	
MULTILATERAL FUND SUPPORT (in US$ thousands)							Total
6.MLF Funding for the Annual Programs		25,000	10.000	10.000	1.500	0	46.500
7.Agency support costs							

Accordingly, the targets for the 2006 Annual Program are as follows:

a) Total CTC production for CTC consumption and CFC feedstock will not exceed 29,661 ODP Tons (26,964 MT) in 2006.

b) National annual CTC consumption control target in 31 PA applications will not exceed 7,892 ODP Tons (7,174 MT) in 2006.

ACTIVITIES TO BE COVERED IN THE 2006 ANNUAL PROGRAM

4. The implementation modalities for Annual Programs are contained in the CTC/PA Sector Plan (Phase II) document. The Sector Plan for Phaseout ODS Process Agent Applications (Phase) and Corresponding CTC Production in China has been finalized. This Program will support the following activities, which are further described in the sections that follow:

(a) Issuance and enforcement of CTC production quota systems;
(b) Activities addressing CTC surplus from CM plants.
(c) Issuance and enforcement of CTC consumption quota system for the PA II Sector Plan
(d) Closure of small CPP & CEVA enterprises and PA II enterprises with limited or no production,
(e) Follow the development of substitute technology for CPP & CEVA,
(f) Preparation of technical proposals for emission control for CPP&CEVA enterprises;
(g) Initiate conversion contracts with MPB, MIC, CNMA, CCMP, Imidacloprid and Buprofenzin PA enterprises,
(h) Review of potential new process applications and technologies available, and
(i) Technical assistance activities.

PROGRAMMED ACTIVITIES DURING THE YEAR

5. ***Policy actions.*** The following policy measures will be initiated by the Government. These actions are necessary to implement of the annual program and for the success of the sector plan (Phase II).

(a) Reinforce CTC production quota systems: A system to limit production of CTC has been established in 2003. According to this system, production quotas will be issued to CTC producers every year to ensure that total production does not exceed the amount specified by the quotas, and quarterly reporting will be required from the producers. The CTC production quota system works well from 2003, which will be reinforced in PA II sector plan.

(b) Strengthening CTC consumption quota system for the PA Sector (Phase II): A CTC consumption quota system has been established in 2003 for the implementation of the PA I sector plan. This system will be applied to PA II sector plan accordingly. According to this system, all CTC users should submit their annual CTC consumption plan for the following year by the end of October to SEPA for reference and approval in December each year. The actual CTC procurement quota for the following year will be issued based on their actual CTC consumption in the **base- or current year** and the overall national CTC consumption control target, to ensure that total consumption for PAII sector in 2006 does not exceed the allowed maximum, 7,892 ODP tons CTC.

(c) Strengthening CTC sales registering system: The system is well implemented in the PA I sector plan to control CTC sales and consumption, and will be strengthened and enforced more strictly. According to the system, all CTC dealers must be registered and should quarterly submit their CTC sales records to SEPA. ,

(d) The **"Complimentary Circular on Strict Control of New Construction or Capacity Expansion of CTC Consumption Production Line"** will be promulgated in 2006. The circular will ban new construction and capacity expansion of all production lines that use CTC as process agent. The circular aims to curb the rapid development of consumption of CTC for new potential process agents applications, which have not yet been reviewed and approved by the Party. This will also facilitate phaseout of CTC used in potential new process agents applications.

6. ***Enterprise-level activities*.** There will be five types of activities at the enterprise level: production quotas for CTC producers, and emissions control, conversions, closures for PA enterprises and signing agreement with enterprises on permanent stop use of CTC for some production lines related to 13 PA applications. All these activities will be based on assignment of quotas.

(a) ***Production Quotas for CTC producers:*** Quotas are presently assigned to all eligible CTC producers under the PA I sector plan. Under PA II sector plan the quotas will be adjusted to ensure that the maximum allowable production limit of 29,661 ODP tonnes of CTC in 2006 is not exceeded. In addition, PA II will also address how to handle the remaining CTC production at CMs plants in the following years,.

(b) ***Consumption quotas for all PA II enterprises:*** CTC consumption quotas will be assigned to all eligible PA II enterprises based on their base year consumption and present situation to ensure that the maximum allowable consumption is limited to 7,892 **ODP tonnes of CTC** in 2006.

(c) ***Phaseout Contracts :*** PA II enterprises have the right to choose their phase-out modality. The enterprises will have the following options:

(I) ***Closure:***. For PA II enterprises selecting the closure option in 2006, contracts will be signed as soon as possible. All the enterprises selecting the production closure option will stop production within the year and the production equipment will be dismantled.

(II) ***Conversion:*** For the PA II enterprises that wish to receive MLF funding in 2006 for conversion can apply for financial support. The companies will hire professional engineering companies to assist preparing their conversion projects. Contract will be signed based on a review and approval by SEPA of their proposal and available MLF funds. The experience gained from the projects will provide valuable information for other PA II enterprises that will sign conversion contracts later.

(III) ***Emission control:*** For CPP/CEVA, PA enterprises with capacity over 1000t/a who wish to implement emission control projects in 2007 will have to submit their proposals to SEPA for review and approval in 2006. The emission reduction projects will have to be initiated in 2007..

(d) ***Sign agreement on permanent stopping use of CTC with enterprises related to 13 PA applications:*** For some PA II enterprises who do not want to dismantle the multifunctional production line and commit to stop the production of the CTC related product and only use the production line for the production of other products using ODS free technology, agreement on permanent stopping use of CTC as process agent for the CTC related product will be signed with them.

(e) ***Preparation for other options:*** Preparation of activities for substitute technologies and emission control for 2007 and 2008 will be initiated in 2006.

7. ***Technical assistance (TA) activities***. TA activities are essential to the success of the phaseout objective. All terms of references and detailed work programs will have to be agreed with the World Bank before implementation. 2006 TA activities will include:

(a) ***Extension of the Management Information System (MIS) to include ODS Phaseout in PA II sector plan.*** The MIS is an important tool in the management and supervision of all phaseout activities. It is used to monitor ODS phaseout and closure activities. It is also the basic instrument to generate progress reports on the implementation of the ODS phaseout required for SEPA management, the ExCom, and the World Bank. This system will be extended to cover the second phase of the PA sector.

(b) ***Training of personnel involved in implementation of phaseout activities.*** To implement the phaseout plan effectively, it is necessary to provide training to: (i) CTC producers; (ii) CTC dealers; (iii) auditors; (iv) ODS consumers that use CTC as new PA; and (v) ODS consumers in the PA Sector (Phase II). Training is needed to prepare enterprises to carry out phaseout activities in the following years, to train government officials to properly supervise ODS PA consumption, and to refine operating procedures of the sector phaseout approach. This type of training will need to be repeated every year in the first few years of implementation. However, training of CTC producers, dealers and auditors will be implemented in the PAI sector plan.

(c) ***Domestic investigation of new PA consumers other than PAI and PAII:*** As China government promised to provide a detailed report of new PA applications in China by the end of 2006, and promised to phaseout new PA applications once the Party would list them as PA, it's very important and urgent for China to identify clearly all the PA consumers other than PAI and PAII as soon as possible. A consultant firm will be selected in the early 2006 to carry out the investigation, which will cover the conditions of production, production process, capacity, CTC consumption, enterprise knowledge of possible

substitute technologies, etc. The investigation will assist China in control and future phaseout of new PA.

(d) ***Study of CTC consumption and emission in production of CPP/CEVA:*** China requested 994 ODP tonnes CTC consumption in PAII sector plan in 2010. However, the 994 means CTC make-up quantity, not consumption or emission. As the Party hasn't definite stipulation of emission control level of PA for Article 5 country, it's not clear that whether the 994 ODP tons of CTC is feasible and will be accepted by the Party. Therefore, China government feels it essential to study details of CTC consumption and emission in CPP/CEVA production.

(e) ***Technical consulting services of experts.*** Individual consultants will be recruited to provide technical services on substitute technologies of CTC PA applications to SEPA to review and provide comments on the technical proposals and safety issues. Experienced domestic experts will be selected based on the procurement rules of World Bank.

(f) ***Other activities.*** Other TA activities that are identified in the course of the year will be taken up as necessary.

8. The above targets, policy initiatives, enterprise-level and technical assistance activities are summarized in Tables 2 - 4 below.

Table 2: Targets under 2006 Annual Program

Target I	**Maximum Allowable sum of production and Imports of CTC**						
Indicators	**Sub-sector**	**2006 (Based on PA I Agreement)**	**2006 (year of Program)**	**Reduction (ODP t-CTC)**	**Funding US$'000**	**Key actions required**	**Key dates**
		(ODP Tons)					
Supply of CTC	Import	0	0			None; imports banned on April 1, 2000	N/A
	Production	32,044	29,661	2,383	0*	1. Issue CTC production quotas. 2. Sign CTC production reduction contracts.	1.By March 31, 2006 2. By Feb 28, 2006
	Total	**32,044**	**29,661**	**2,383**	**0***		
Target II	**National annual CTC Consumption in the PA Sector (Phase II)**						
Indicators			**2006 (year of Program)**	**Reduction**	**Funding US$'000**	**Key actions required**	**Key dates**
		(ODP Tons)					
Consump-tion of CTC	31 PA enterprises		7,438	/	24,000	1. Issue CTC consumption quotas. 2. Sign CTC consumption phaseout contracts.	1. By March 31, 2006 2. By June 30, 2006
	Total		**7,438**	**/**	**24,000**		

*The funding for CTC production reduction contracts will be originated from CTC/PAI sector plan.

Table 3: Policy Actions

Policy/Activity Planned			
Initiatives	**Funding Requested**	**Actions Required**	**Key Dates**
1. Policies to control CTC Production, consumption and sales.	N/A	1. Issue production quotas to CTC producers. 2. Issue consumption quotas to CTC consumers. 3. Issue registering license to CTC dealers. 4. Issue "Complimentary Circular on Strictly Control of New Construction or Capacity Expansion of CTC Consumption Production Line"	1. March 2006 2. Jan 2006 3. Jan 2006 4. April 2006

Table 4: Technical assistance activities

Technical assistance activities				
Proposed Activity	**Target group**	**Funding (US$ Million)**	**Actions Required**	**Key Dates**
1. Extension of MIS to this sector	Government and domestic implementing agency	0.050	1. TOR to be agreed with the Bank 2. Selection of contractors 3. Contract signing with contractor 4. Reinforce MIS in PMO	1. April 2006 2. May 2006 3. June 2006 4. Operational by Dec. 2006
2. Training of personnel involved in implementation of phaseout activities.	Government enforcement agencies	0.1 (just for 13 PA consumers training)	1. TOR to be agreed with World Bank 2. Training of 13 PA enterprises	1. April 2006 2. June 2006
3. Domestic investigation of new PA consumers		0.150	1. TOR to be agreed with the Bank 2. Selection of contractors 3. Contract signing with contractor 4. Domestic investigation 5. Seminar to discuss the survey report 6. Final report	1. Feb. 2006 2. March. 2006 3. April, 2006 4. May– Sep. 2006 5. Oct. 2006 6. Dec. 2006
4. Study of CTC consum/emission in CPP/CEVA production		0.100	1. TOR to be agreed with the Bank 2. Consultant selection 3. Contract signing with contractor 4. Field study 5. Final report	1. April 2006 2. May 2006 3. June, 2006 4. Jul.- Nov. 2006 5. Dec. 2006
5. Technical consulting services of experts		0.300	1. TOR to be agreed with the Bank 2. Selection of experts 3. Service Contract signed with experts 4. Travel costs of experts will be included	1. April, 2006 2. May, 2006 3. June, 2006
6. Other TA		0.300		
Total for TA activites		**1.000**		
Total annual funding		**25.000**		

ANNEX I: PRODUCTION AND STATUS OF CTC PRODUCERS

No.	Enterprise Name	Type of CTC production facility	Capacity in 2001[1] (MT/year)	CTC Production Recorded				Status
				2001	2002	2003	2004	
CTC-1	Luzhou North Chemical Industrial Co., Ltd.	Co-production	3,000	2,106	2,318	2,105	2093.8	Producing
CTC-2	Zhejiang Quhua Flurochemical Co. Ltd.	Co-production	20,000 (22,250)	16,204	17,217	16,204	15986.01	Producing
CTC-3	Liaoning Panjin No. 3 Chemical Plant	Dedicated	3,000	0	0	0	0	Dismantled in May 2004
CTC-4	Chongqing Tianxuan Chemical Co., Ltd.	Dedicated	4,400	2,100	3,067	870	0	Dismantled in Dec 2003
CTC-5	Chongqing Tiansheng Chemical Co. Ltd	Distilling	500	245	195	130	31.14	Producing
CTC-6	Chongqing Tianyuan Chemical General Plant	Dedicated	9,000	8,009	8,198	6,114	1429.27	Dismantled in Dec 2004
CTC-7	Taiyuan Chemical Industrial Co., Ltd.	Dedicated	4,000	0	0	0	0	Dismantled in Nov 2004
CTC-8	Luzhou Xinfu Chemical Industry Co. Ltd.	Dedicated	8,000	6,903	7,754	5,203	4488.6	Producing
CTC-9	Jiangsu Meilan Chemical Co., Ltd.	Co-production	3,500 (10,000)	703	2,929	3,396	3450.46	Producing
CTC-10	Guangzhou Hoton Chemical (Group) Co., Ltd.	co-production	5,000	0	0	0	0	Closed and Dismantled in 1997

CTC-11	Sichuan Honghe Fine Chemical Co., Ltd.	Co-production	4000	3,451	21,018	13,763	11935.78	Producing
		Dedicated	16,000 (17,750)	13,806				Producing
CTC-12	Shanghai Chlor-Alkali Chemical Co., Ltd.	Co-production with PCE	10,000	7,209	9,192	7,209	7909	Producing
CTC-13	Quzhou Jiuzhou Chemical Co., Ltd.	Distilling	1,000	596	477	594	602.5	Producing
CTC-14	Wuxi Greenapple Chemical Co., Ltd.	Co-production	0 (2,000)	/	/	495	1139.28	Start production in 2003
CTC-15	Shandong Jinling Chemical Co., Ltd.	Co-production	0 (2,000)	/	/	148	1721.34	Start production in 2003
CTC-16	Shandong Dongyue Chemical Co., Ltd.	Co-production	0 (2,500)	/	/	/	309.8	Start production 2004
CTC-17	Jinan 3F Fluorochemical Co., Ltd.	Dedicated	4000	0	0	0	0	Dismantled in July 2004
Total (ODS tons)			95,400 (112,400)	61,332	72,365	56,231	51096.98	
Total (ODP tons)				67,465	79,602	59,860[2]	56206.68[3]	

1: The data in parenthese is the CTC capacity in 2004.

2: There are 1,813 MT CTC were verified as feedstock for non-ODS chemicals in 2003.

3: There are 5465.47 MT CTC were verified as feedstock for non-ODS chemicals in 2004.

ANNEX II: INFORMATION ON PA (PHASE II) ENTERPRISES

A. ODS Consumption of Each Applications in 2001-2003

ODS used	Application No.	Product	Annual consumption of ODS (t/a)		
			2001	2002	2003
CTC	PA19	Cyclodime	230.95	180.55	152.85
CTC	PA20	CPP	2,303.98	3,157.15	2,505.32
CTC	PA21	CEVA	188.68	208.22	225.08
CTC	PA22	MIC derivatives	718.35	627.58	574.54
CTC	PA23	MPB	623.23	587.61	679.95
CTC	PA24	DCMP	0.00	0.00	0.00
CTC	PA25	Imidacloprid	487.54	726.10	264.81
CTC	PA26	Buprofenzin	213.09	199.38	316.87
CTC	PA27	Oxadiazon	14.25	24.70	57.00
CTC	PA28	CNMA	108.80	133.13	136.12
CTC	PA29	Mefenacet	22.24	8.11	6.93
CTC	PA30	DCBT	16.03	0.00	0.00
		Sub-Total CTC tons	**4,927.15**	**5,852.52**	**4,919.46**
BCM	PA31	BPS	0.00	0.00	0.00
		Total ODP tons	**5,419.87**	**6,437.77**	**5,411.4**

B. Production Lines of Each Applications

Application Number	Name of Application	Total Number of Production Lines (Number of enterprises in brackets)	With production in 2003, and eligible	No production in 2003, but eligible	With production, but not eligible
PA19	Cyclodime	9	6	3	0
PA20/21	CPP/CEVA	15	15	0	0

PA22	MIC	6	6	0	0
PA23	MPB	3	3	0	0
PA25	Imidacloprid	4	3	1	0
PA26	Buprofenzin	3	2	1	0
PA27	Oxadiazon	3	1	2	0
PA28	CNMA	1	1	0	0
PA29	Mefenacet	1	1	1	0
Totals		45（40*）	38	7	0

*For details see the following Table ”C. Eligible enterprises”

C. PA Enterprises in the Sector Plan

Ser. No	Enterprise name	Product
1	Suzhou XianKe Chemical Industry Co., Ltd.	CPP
2	Suzhou Hengteng Chemical Co., Ltd.	CPP
3	Guangdong Yangchun Gangli Chem Co., Ltd.	CPP
4	Harbin Qianyu Fine ChemCo.,Ltd.	CPP
5	Changshu Xiangyang Rubber-Resin Auxiliary Plant	CPP
6	Yancheng Runhua Application chemical Institute	CPP
7	Yan Cheng San Hua Chemical Co., Ltd.	CPP
8	Shandong Huayang Pesticide Chem Ind Group Co., Ltd	CPP
9	Shanxi Xizhou Sihai Chemical Co., Ltd.	CPP
10	Shenyang Kunmei Decoration MaterialCo.,Ltd.	CPP
11	Xingang Coraphite Industry Co.,Ltd.	CPP
12	Guangzhou Jinzhujiang Chemical Co., Ltd.	CPP/CEVA
13	Shunde Antai Printing Ink Chemical Co., Ltd.	CPP/CEVA
14	Jincheng Chemical Co., Ltd.	CPP/CEVA
15	Rudong Shidian Chemical	CPP
16	Sanonda(Jingzhou) Pesticides & Chem Co., Ltd.	MIC/MIC Derivs.
17	Hunan Gofar Fine Chem Industry Tech. Co., Ltd.	MIC/MIC Derivs.
18	Hunan Haili Chem Industry Co., Ltd. Pilot Plant	MIC/MIC Derivs.
19	JiangSu Changlong Chemical Co., Ltd.	MIC/MIC Derivs. *Buprofenzin* *Imidacloprid,* *Mefenacet*

20	*JiangSu Changlong Chemical Co., Ltd.*	**Mefenacet** *MIC/MIC Derivs.* *Buprofenzin* *Imidacloprid,*
21	Haili Guixi Chemical Pesticide Co., Ltd.	MIC/MIC Derivs.
22	ShangDong Huayang Tech. Co.,Ltd.	MIC/MIC Derivs.
23	Jiangyin Tongzhi Tianlong Chemical Factory	MPB
24	Jintan Huasheng Chemical Adjuvant Co. Ltd	MPB
25	Changzhou Yekang Chemical Product Co.,Ltd.	Chlordane Mirex
26	Dongtai No.3 Chemical Factory	Chlordane
27	Liyang Guanghua Chemical Co., Ltd.	Chlordane/ Mirex
28	Liyang Xinhai Chemical Factory	Chlordane / Mirex
29	Shanghai Fengjiang Termite Control Co., Ltd.	Chlordane / Mirex
30	Suzhou Jianfeng Termite Control Co.Ltd.	Chlordane
31	Jintan Shuibei Termite Control Material Factory	Chlordane
32	Taicang Xintang The second Chemical Factory	Chlordane / Mirex
33	Tangcang HushiReagent CO., Ltd	Chlordane
34	Jiangsu Anpon Electrochemical Co., Ltd.	Buprofenzin
35	Zhejiang Longyou Greenland Pesticide Co., Ltd.	Buprofenzin
36	Jiangsu Yangnong Chemical Group Co., Ltd.	Imidacloprid
37	Zhejiang Hisun Chemical Co., Ltd.	Imidacloprid
38	Jingjiang Jindun Agrochemical Co. Ltd.	Oxadiazon
39	Luzhou Agrochemical	Oxadiazon
40	Chongqing Changfeng Chemical Factory	CNMA

D. CTC Consumption for Each Sub-sector and Enteprise

Unit: MT

Enterprise Name	**2001**	**2002**	**2003**
CPP producers (CTC)			
Suzhou XianKe	189.46	147.37	120.70
Suzhou Hengteng	0.00	32.00	10.02
Yangchun Gangli	435.00	494.58	315.00
Guangzhou Jinzhujiang	795.70	666.12	430.91
Antai Printing Ink	0.00	0.00	18.18
Jincheng Chem.	260.72	872.03	715.58
Qianyu Fine Chem.	148.80	313.40	296.40
Changshu Xiangyang	171.00	153.00	150.00

Yancheng Runhua	144.33	161.64	159.52
San Hua Chem.	27.88	95.00	148.00
Kunmei Decoration	n.a.	57.00	23.00
Huayang Group	n.a.	n.a.	n.a.
Xinzhou Shai	131.10	149.00	50.00
Xingang Coraphite	0.00	0.00	38.00
Shidian Organic Chemicals	0.00	16.00	30.00
Sub-Total	**2303.98**	**3157.15**	**2505.32**
CEVA producers (CTC)			
Guangzhou Jinzhujiang	131.25	110.98	114.38
Antai Printing Ink	0.00	2.00	9.00
Jincheng Chem.	57.43	95.25	101.70
Sub-Total	**188.68**	**208.22**	**225.08**
MIC Series producers(CTC)			
Jingzhou Sanonda	46.65	60.97	29.49
Gofar Fine Chem.	68.23	70.22	88.21
Hunan Haili	58.58	81.26	76.24
Changlong Chem.	105.45	137.37	97.98
Haili Guixi	311.47	195.57	202.6
Huayang Tech.	127.97	82.2	80.03
Sub-Total	**718.35**	**627.58**	**574.54**
MPB producers(CTC)			
Suhua Group	493.20	456.07	501.89
Jintan Huasheng	130.03	131.54	178.06
Jiangyin Tongzh	n.a	n.a	n.a
Sub-Total	**623.23**	**587.61**	**679.95**
Imidacloprid producers(CTC)			
Changlong Chem.	178.99	313.93	81.36
Suhua Group	140.90	1.32	0.00
Yangnong Group	0.00	8.80	160.20
Hisun Chem.	167.65	402.05	23.25
	487.54	**726.10**	**264.81**
Buprofenzin producers(CTC)			
Anpon Electrochem	93.99	102.11	189.91
Changlong Chem.	57.70	97.27	126.96
Longyou Greenland	0.00	0.00	0.00
	213.09	**199.38**	**316.87**

Oxadiazon producers(CTC)			
Jindun Agrochem.	14.25	24.70	57.00
Suhua Group	/	/	/
Luzhou Agrochemical	0.00	0.00	0.00
	14.25	**24.70**	**57.00**
CNMA producer(CTC)			
Changfeng Chem.	108.80	133.13	136.12
	108.80	**133.13**	**136.12**
Mefenacet producers(CTC)			
Changlong Chem.	22.24	8.11	6.93
Suhua Group	/	/	/
	22.24	**8.11**	**6.93**
DCBT producer(CTC)			
Changfeng Chem.	16.03	0.00	0.00
	16.03	**0.00**	**0.00**

DRAFT – February 2006

DRAFT AGREEMENT BETWEEN CHINA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE PHASE-OUT OF ODS PROCESS AGENT APPLICATIONS (PHASE II)

1. This Agreement represents the understanding of China and the Executive Committee with respect to the complete phase-out of **controlled CTC production and consumption** of the ozone depleting substances set out in Appendix 1-A ("The Substance and PA Applications") prior to Jan. 1 of 2010, compliance with Protocol schedules.

2. The Country agrees to phase out the controlled use of the Substances in accordance with the annual phase-out targets set out in Appendix 2-A ("The Targets, and Funding") under this Agreement. The annual phase-out targets will, at a minimum, correspond to the reduction schedules mandated by the Montreal Protocol. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to CTC production and consumption phase-out requirements as defined by the Montreal Protocol as per Decision XVII/6 taken at the 17th meeting of the Parties to Montreal Protocol.

3. Subject to compliance with the following paragraphs by the Country with its obligations set out in this Agreement, the Executive Committee agrees in principle to provide the funding set out in row 6 of Appendix 2-A ("The Targets, and Funding") to the Country. The Executive Committee will, in principle, provide this funding at the Executive Committee meetings specified in Appendix 3-A ("Funding Approval Schedule").

4. The Country will meet the overall production and consumption limits of CTC as indicated in Appendix 2-A. It will also accept independent verification by the relevant Implementing Agency of achievement of these consumption limits as described in paragraph 8 of this Agreement.

5. The Executive Committee will not provide the Funding in accordance with the Funding Approval Schedule unless the Country satisfies the following conditions at least **4 weeks** prior to the applicable Executive Committee meeting set out in the Funding Approval Schedule:

(a) That the Country has met the Target for the applicable year;

(b) That the meeting of the Target set in row 4 in table in Appendix 2-A has been independently verified as described in paragraph 8; and

(c) That the Country has substantially initiated all actions set out in the last Annual Implementation Programme;

(d) That the Country has submitted and received endorsement from the Executive Committee for an Annual Implementation Programme in the form of

Appendix 4-A ("Format for Annual Implementation Programmes") in respect of the year for which funding is being requested.

6. The Country will ensure that it conducts accurate monitoring of its activities under this Agreement. The institutions set out in Appendix 5-A ("Monitoring Institutions and Roles") will monitor and report on that monitoring in accordance with the roles and responsibilities set out in Appendix 5-A. This monitoring will also be subject to independent verification as described in paragraph 8.

7. While the Funding was determined based on eligible incremental costs and on the basis of estimates of the needs of the Country to carry out its obligations under this Agreement, the Executive Committee agrees that the Country has flexibility to use the Funding for other purposes that can be demonstrated to facilitate the smoothest possible phase-out, consistent with this Agreement, whether or not that use of funds was contemplated in determining the amount of funding under this Agreement. Any changes in the use of the Funding must, however, be documented in advance in the Country's Annual Program, endorsed by the Executive Committee as described in sub-paragraph 5(d) and be subject to independent verification as described in paragraph 8.

8. The Country agrees to assume overall responsibility for the management and implementation of this Agreement and of all activities undertaken by it or on its behalf to fulfil the obligations under this Agreement. The World Bank has agreed to be the lead implementing agency ("Lead IA") in respect of the Country's activities under this Agreement. The Lead IA will be responsible for carrying out the activities listed in Appendix 6-A including but not limited to independent verification. The country also agrees to periodic evaluations, which will be carried out under the monitoring and evaluation work programmes of the Multilateral Fund. The Executive Committee agrees, in principle, to provide the Lead IA with the fees set out in rows 7 of Appendix 2-A.

9. Should the Country, for any reason, exceed the CTC production and consumption limits given in Appendix 2-A or otherwise does not comply with this Agreement, then the Country agrees that it will not be entitled to the Funding in accordance with the Funding Schedule. In the discretion of the Executive Committee, funding will be reinstated according to a revised Funding Schedule determined by the Executive Committee after the Country has demonstrated that it has satisfied all of its obligations that were due to be met prior to receipt of the next instalment of Funding under the Funding Schedule. The Country acknowledges that the Executive Committee may reduce the amount of the Funding by the amounts set out in Appendix 7-A in respect of each ODP tonne of the amount exceeding the Maximum Allowable CTC Production and Consumption limit (Appendix 2-A) in any one year.

10. The funding of this Agreement will not be modified on the basis of any future Executive Committee decision that may affect the funding of any other ODS sector projects or any other related activities in the Country.

11. The Country will comply with any reasonable request of the Executive Committee and the Lead IA to facilitate implementation of this Agreement. In particular, it will provide the Lead IA with access to information necessary to verify compliance with this Agreement.

12. All of the agreements set out in this Agreement are undertaken solely within the context of the Montreal Protocol and as specified in this Agreement. All terms used in this Agreement have the meaning ascribed to them in the Protocol unless otherwise defined herein.

APPENDIX 1-A THE SUBSTANCES AND PA APPLICATIONS

1. The ozone-depleting substance to be phased out under the Agreement is CTC production (Annex B, Group II) and ODS consumption for the following process agent applications (see Decision XV/6 of ExCom (UNEP/OzL.Pro.15/9).

No.	Process agent application	Substance
19	Production of Cyclodime	CTC
20	Production of chlorinated polypropene	CTC
21	Production of chlorinated EVA	CTC
22	Production of methyl isocyanate derivatives	CTC
23	Production of 3-phenoxy bezaldehyde	CTC
24	Production of 2-chloro-5-methylpyridine	CTC
25	Production of Imidacloprid	CTC
26	Production of Buprofenzin	CTC
27	Production of Oxadiazon	CTC
28	Production of Chlordized N-methylaniline	CTC
29	Production of Mefenacet	CTC
30	Production of 1,3-dichlorobenzothiazole	CTC
31	Brominated styrenic polymer	BCM (bromochloromethane)

APPENDIX 2-A THE TARGETS, AND FUNDING (ODP tonnes)

	Baseline (2003)	2006	2007	2008	2009	2010	
1. Max allowed CTC production for consumption under the MP	29,367	7,342	7,342	7,342	7,342	4,405	
2. Max allowable CTC consumption as per the Montreal Protocol control measures	55,900	8,385	8,385	8,385	8,385	1,214*	
3. Max allowable CTC consumption in CTC/PA (Phase I) sector plan	5,049	493	493	493	493	220*	
4. Max allowable CTC consumption in CTC/PA (Phase II) sector plan	5,411	7,892	7,892	7,892	7,892	994*	
5. Potential new Process Agent Applications	Not Applicable	Not Applicable	Not Applicable	TBD	TBD	TBD	
MULTILATERAL FUND SUPPORT (in US$ thousands)						Total	
6. .MLF Funding for the Annual Programs		25.000	10,000	10,000	1,500	46.500	
7.Agency support costs							

- The allowed CTC production for consumption include the additional production of 10% of base level allowed for basic domestic need from 2005 to 2009 and 15% from 2010

- The Bank will verify consumption by companies and applications covered by the PA II Sector Plan (Row 5). The annual verification will cover a random selection of at least [30%] of all enterprises covering at least [30%] of the PA II consumption,

- Consistent with Decision XVII/6 of the Parties to the Montreal Protocol, potential new process agent applications will be considered consumption from 2008 in accordance with decisions to be taken at the 19th meeting of the Parties to the Montreal Protocol in 2007.

- China will collect information on the use of CTC by companies using processes covered by the new process agent applications when the applications have been confirmed by the Parties,

- It is understood that the proposed emission level for CPP and CEVA enterprises using emission control technology should be reviewed and endorsed by the Parties before 2010 to ensure that they represent "reasonable achievable in a cost effective manner without undue abandonment of infrastructure" consistent with Decision X/14.

APPENDIX 3-A FUNDING APPROVAL SCHEDULE(US$'000)

1. Funding other than the payments in 2006, will be considered for approval at the **second meeting of the year** of the annual implementation plan. The agreed funding level for each year is shown in row 6 in Appendix 2-A.

APPENDIX 4-A- FORMAT FOR ANNUAL IMPLEMENTATION PROGRAMMES

1. The 2006 AP of the CTC/PA sector plan (phase II) submitted with the PA II Sector Plan is consistent with the agreed format for Annual Programs. This format will be used for following years Annual Implementation Programs

APPENDIX 5-A MONITORING INSTITUTIONS AND ROLES

1. PMO is the core organization for monitoring the implementation of PA II Sector Plan with the responsibility for reporting to the World Bank. PMO will be responsible for monitoring implementation of policy measures and technical assistance activities and for submitting quarterly progress reports to the Bank.

2. DIA will assist PMO in managing implementation of PA II Sector Plan and will submit quarterly reports to PMO.

3. The implementation status of the PA II Sector Plan will be reported to ExCom once a year through the Annual Programs.

4. The Bank will supervise the implementation of Annual Programs and will have access to any ongoing and completed activities, including random visits to PA enterprises and CTC producers under the PA II Sector Plan.

APPENDIX 6-A ROLE OF THE LEAD IMPLEMENTING AGENCY

1. The Lead IA will be responsible for a range of activities to be specified in the project document along the lines of the following:

(a) Ensuring performance and financial verification in accordance with this Agreement and with its specific internal procedures and requirements as set out in the Country's phase-out plan;

(b) Providing verification to the Executive Committee that the Targets have been met and associated annual activities have been completed as indicated in the annual implementation programme;

(c) Assisting the Country in preparation of the Annual Implementation Programme;

(d) Ensuring that achievements in previous Annual Implementation Programmes are reflected in future Annual Implementation Programmes;

(e) Reporting on the implementation of the Annual Implementation Programme of the preceding year and preparing an Annual Implementation Programme for the year for submission to the Executive Committee;

(f) Ensuring that technical reviews undertaken by the Lead IA are carried out by appropriate technical experts;

(g) Carrying out required supervision missions;

(h) Ensuring the presence of an operating mechanism to allow effective, transparent implementation of the Annual Implementation Programme and accurate data reporting;

(i) Verification for the Executive Committee that consumption of the Substances has been eliminated in accordance with the Target;

(j) Ensuring that disbursements are made to the Country in a timely and effective manner; and

(k) Providing assistance with policy, management and technical support when required.

APPENDIX 7-A REDUCTIONS IN FUNDING FOR FAILURE TO COMPLY

1. In accordance with paragraph 9 of the Agreement, the amount of funding provided may be reduced by [US $ 1,000] per ODP tonne of reductions in production and consumption not achieved in the year.

CHINA CFC PRODUCTION PHASE-OUT PROGRAM
2005 VERIFICATION REPORT
FEBRUARY 21, 2006

Inspection Team

F.A. Vogelsberg: Mission Leader and primary text preparation - Annex I
Hua Zhangxi (HZX): Data Summary - Annex II (Gradual Closure) (available upon request)
Wu Ning: Financial Verification of CFC Production for China in 2005- Annex III

Assisted and Accompanied By

Lin Nanfeng: (SEPA/FECO)

Inspection Mission Time Frame

February 8-22, 2006

Enterprises in Visitation Order

Zhejiang Juhua Fluoro-Chemcial Co. Ltd- Zhejiang Province, Quzhou City
Zhejiang Dongyang Chemical Plant - Zhejiang Province, Dongyang City
Zhejiang Linhai Limin Chemical Plant – Zhejiang Province, Linhai City
Zhejiang Chemical Research Institute (ZCRI) - Zhejiang Province, Hangzhou City
Jiangsu Changsu *3F Refrigerant Co. LTD - Jiangsu Province, Changshu City
Jiangsu Meilan Electro-chemical Co. LTD - Jiangsu Province, Taizhou City

*All World Bank documents spell as Changsu: while the true spelling is Changshu

Report Format and Contents

- Verification conclusions for CFC Production in China for 2005.
- Annex I - Text covering details of technical effort by Vogelsberg and Hua for the six CFC Enterprises visited and inspected.
- Annex II - CFC production verification tables for gradual closure for the six Enterprises. (Available upon request)
- Annex III - Financial verification of CFC Production for China in 2005

Verification Conclusions with respect to China's CFC Production in 2005

There was no complete closure project in China CFC Production Sector 2005, therefore, there were six enterprises producing CFC products in China 2005, the same as in 2004. The verified overall national production of CFCs in 2005 is 18,720.48 tonnes (ODP). The following table is the breakdown in accordance with various product types: The product stock summaries for the six CFC producers in 2005 are shown in this table..

Type of CFC Product	Number of Producers	Total Production		Total Producer's Stock in 2005 (MT)		
		ODS (MT)	ODP(tonnes)	Opening	Closing	Change
CFC-11	3	8,294.383	8,294.383	697.67	1,136.93	+ 439.27
CFC-12	4	9,714.055	9,714.055	2,459.31	2,045.67	- 413.64
CFC-13	1	20.292	20.292	0.315	8.731	+ 8.416
CFC-113	1	686.630	549.304	837.39	589.52	- 247.87
CFC-114	1	10.995	10.995	22.93	8.10	- 14.83
CFC-115	2	219.097	131.458	68.83	63.30	- 5.53
Total National Production			18,720.487			

The targeted limit for total CFC production in 2005 was 18,750 ODP tonnes as specified in the Agreement. Therefore the verified total actual CFC production in 2005 is 29.513 ODP tonnes lower than the targeted limit.

The CTC Consumption for overall national CFC Production in 2003 is summarized in the following table:

CTC used for	Amount CTC (MT)
Direct consumption for CFC-11 production	10,072.89
Direct consumption for CFC-12 production	13,312.23
Direct consumption, subtotal for CFC-11 & 12	23,385.12
Indirect consumption for CFC-13 production	79.7
Overall national CTC consumption for CFC Production in 2005 (including CFC 11,12 & 13)	23,464.82

The total consumption of CTC for the production of 8,294.38 MT of CFC-11 product is 10,072.89 MT; and the overall average CTC/ CFC-11 ratio is 1.214 (theoretical 1.12). Among the three CFC-11 producers, the producer that had the lowest CTC/ CFC-11 ratio (1.194) is Jiangsu Changshu 3F Refrigerant Co. Ltd. (SRI# A 10); and the highest ratio (1.303) is Jiangsu Meilan Chemical Co. Ltd (SRI# A 8).

The total consumption of HF for the production of 8,294.38 MT of CFC-11 product is 1,296.38 MT; and the overall average HF/ CFC-11 ratio is 0.156 (theoretical 0.145). Among the three CFC-11 producers, the producer that had the lowest HF/ CFC-11 ratio (0.150) is Jiangsu Changshu 3F Refrigerant Co. Ltd. (SRI# A 10); and the highest ratio (0.183) is Jiangsu Meilan Chemical Co. Ltd.(SRI# A 8).

The total consumption of CTC for the production of 9,714.05 MT of CFC-12 product is 13,312.23 MT; and the overall average CTC/ CFC-12 ratio is 1.370 (theoretical 1.272). Among the four CFC-12 producers, the producer that had the lowest CTC/ CFC-12 ratio (1.325) is Jiangsu Changshu 3F Refrigerant Co. Ltd. (SRI# A 10); and the highest (1.415) is Jiangsu Meilan Chemical Co. Ltd.(SRI# A 8).

The total consumption of HF for the production of 9,714.05 MT of CFC-12 product is 3,761.31 MT; and the overall average HF/ CFC-12 ratio is 0.387. Among the four CFC-12 producers, the producer that has the lowest HF/ CFC-12 ratio (0.366) is Zhejiang Juhua Fluoro-chemical Co. Ltd. (SRI # B 14) and the highest (0.451) is Zhejiang Dongyang Chemical Plant (SRI# B12).

A detailed summary of China CFC production in 2005 is attached in the next page.

All the verified monthly production data and raw material consumption data are recorded in the Annex II of this Report while the verification process as well as the assessment and findings are described in Annex I of this Report.

SUMMARY OF CHINA CFC PRODUCTION IN 2005

CFC-11

SRI #	Name of Enterprise	Production (ODS)	Production (ODP)	CTC Consumption	HF Cons'ption	Ratio CTC/ CFC-11	Ratio HF/ CFC-11
A 8	Jiangsu Meilan Chemical Co. Ltd	676.250	676.250	880.84	123.78	1.303	0.183
A 10	Jiangsu Changsu 3F Refrigerant Co. Ltd.	4,950.558	4,950.558	5,912.73	742.65	1.194	0.150
B 14	Zhejiang Juhua Fluoro-chemical Co. Ltd.	2,667.575	2,667.575	3,279.32	429.95	1.229	0.161
	Overall	8,294.383	8,294.383	10,072.89	1,296.38	1.214	0.156

CFC-12

SRI #	Name of Enterprise	Production (ODS)	Production (ODP)	CTC Consumption	HF Cons'ption	Ratio CTC/ CFC-12	Ratio HF/ CFC-12
A 8	Jiangsu Meilan Chemical Co. Ltd.	610.960	610.960	864.59	260.75	1.415	0.427
A 10	Jiangsu Changsu 3F Refrigerant Co. Ltd.	3,822.474	3,822.474	5,063.35	1,489.92	1.325	0.390
B 12	Zhejiang Dongyang Chemical Plant	898.195	898.195	1,267.93	405.29	1.412	0.451
B 14	Zhejiang Juhua Fluoro-chemical Co. Ltd.	4,382.426	4,382.426	6,116.36	1,605.35	1.396	0.366
	Overall	9,714.055	9,714.055	13,312.23	3,761.31	1.370	0.387

CFC-13

SRI #	Name of Enterprise	Production (ODS)	Production (ODP)	CFC-12 Conumption	Ratio CFC-12/CFC-13	Indirect CTC Cons'ption*	Indirect CTC/CFC-13 ratio*
B 8	Zhejiang Linhai Limin Chemical Plant	20.292	20.292	57.00	2.809	79.70	3.928

CFC-113

SRI #	Name of Enterprise	Production (ODS)	Production (ODP)	PCE Consumption	HF Cons'ption	Ratio PCE/ CFC-113	Ratio HF/ CFC-113
A 10	Jiangsu Changsu 3F Refrigerant Co. Ltd.	686.630	549.304	692.00	318.60	1.008	0.464

CFC-114

SRI #	Name of Enterprise	Production (ODS)	Production (ODP)	CFC-113a** Consumption	HF Cons'ption	Ratio CFC-113/ CFC-114	Ratio HF/ CFC-114
B-11	Zhejiang Chemical Research Institute	10.995	10.995	12.92	1.63	1.175	0.148

CFC-115

SRI #	Name of Enterprise	Production (ODS)	Production (ODP)	CFC-113** Consumption	HF Cons'ption	Ratio** CFC-113/ CFC-115	Ratio HF/ CFC-115
A 10	Jiangsu Changsu 3F Refrigerant Co. Ltd.	99.200	59.520	162.00	64.90	1.633	0.654
B-11	Zhejiang Chemical Research Institute	119.897	71.938	155.58	38.34	1.298	0.320
	Overall	219.097	131.458	317.58	103.24	1.450	0.471

* The indirect CTC consumptioon is the consumption for producing 57 MT CFC-12 in Zhejiang Juhua(B14) that used for Linhai Limin (B 8) to produce CFC-13.

** Since 2004 Zhejiang Chemical Research Institute uses CFC 113a as the raw material instead of CFC 113.

ANNEX I

Tuesday, February 9, 2006 - Zhejiang Juhua Fluoro-chemical Co. LTD

12,000 TPA CFC-11 & CFC-12 – Single Plant
15,000 TPA AHF
115,000 TPA Chloromethanes – nominal 20,000 TPA CTC
(Expanded from 70,000 TPA by 45,000 TPA in 2004)

General

The team last visited Juhua January 25, 2005. There have not been any significant changes in the CFC, AHF or Chloromethanes plants during 2005.

Verification of Year 2005 CFC-11/12 Data

Juhua have contained to improve their records to facilitate easy verification of all raw material and CFC production/sales/inventory data. The key to the basic data records are the transfer slips that are generated for each movement of CTC, AHF and CFCs between raw material supply tanks and the CFC production unit as well as daily records for packaging of drums, DACs, cylinders or bulk shipping containers. A daily record is kept that shows three sets of key data on a single sheet; a) amount of CFCs packaged by package size, b) number of packaged containers transferred to sales warehouse and c) the remaining packages in the production warehouse.

They have set up Excel spreadsheets to tabulate every daily transaction with monthly totals for each month. The individual transfer slips are verified against these spreadsheets. We proved 100% agreement on all data records for CFC11/12 production in 2005.

We checked the finished CFC product receiver levels for the start and beginning of 2005 to ensure all new production was accounted for with year-end figures slightly lower than year beginning values, hence no problem.

Juhua is the sole supplier of CFC-12 feed stock to Linhai Limin for their conversion to CFC-13; again these records were in order.

Daily packaging records are not a viable check on daily CFC production since they package to meet inventory and sales requirements. Their bulk tanks are capable of inventorying 240 M^3 of CFC-11 and 700^3 of CFC-12, well in excess of a month's production while their shift receivers can accommodate four days production. However, we were able to do a full year's balance of a) Yr. 2005 CFC-12 packaged production, b) CFC-12 yr. beginning packaged inventory in the production unit, c) yr. ending packaged inventory for CFC-12 and d) yearly transfers (by adding all monthly data) of packaged goods from the production to the sales warehouse. Considering that these are tens of thousands of packages involved we were pleasantly surprised to find a perfect balance for these data.

Juhua now generates a single page document showing each plant outage and cause of outage; using this we verified 2005 plant utilization at 320 days. We spot-checked some monthly plant log sheets to verify accuracy of this record; all were in orders.

The Accountant team member verified all AHF purchases to augment total plant requirements as well as CFC-11/12 sales to domestic customers. All CFC exports were verified against customs declassification documents.

All Juhua 2005 CFC production data was found to be accurate as reported to SEPA.

Saturday, February 11 – Zhejiang Dongyang Chemical Plant

5,000 TPA CFC-12
20,000 TPA HCFC-22 (expanded from 8,000)
25,000 TPA AHF (expanded from 20,000)

General

This is the team's seventh visit to Dongyang Chemical. Addition of a 2nd HCFC-22 line and capacity ream out of the AHF plant occurred in 2004. No changes in 2005.

Verification of Year 2005 Data

This continues to be one of the easiest plants for data verification because of the plant's single product line and multiple records that can be cross-checked.

We examined all CFC-12 filling log sheets for filling of DAC's and cylinders for each day and month and all matched reported production.

We then checked CFC-12 production transfer slips against the above log sheets and found 100% accuracy.

They also create a daily total site balance sheet from the above mentioned records showing: starting CFC-12 inventory, production, transfers to warehouse, CFC-12 sales, and end of day inventory. This record is signed by the site supervisor, warehouse foreman and production supervisor. Using these daily balance sheets they also prepare a monthly balance sheet. This reflects monthly total figures but not used by us for verification.

CTC starting inventory, transfers into the CFC-12 plant, daily CTC use and ending CTC inventory for each day are kept in a bound notebook. The daily consumption figures are also kept as a monthly cumulative figure. We examined all entries for each month and found total agreement with the figures reported to SEPA.

The plant log sheets record daily and cumulative AHF feed values and these figures closely match the official inventory adjusted figures. AHF is transferred via an electronic weigh tank from the plant's AHF production unit.

All daily and monthly transfers of AHF were verified correct as reported to SEPA.

Dongyang's operating day figures have always proven to be very accurate as they keep a daily record showing exactly how many hours raw material feeds were going to the two reactors, hence, their monthly operating days will typically show fractional days. As noted in the past Dongyang and the region are faced with an electrical power shortage and the CFC plant's refrigeration is a significant load, hence they prefer to operate at low rates for longer periods as opposed to starting and stopping and setting higher peak power loads. Their operating days in 2005 were 149.5 vs 223 in 2004, 319 in 2003 and 239 in 2002. This 5,000 TPA plant produced 898.2 MT vs their 2005 quota of 900 MT 18% of their capacity.

Dongyang began 2005 CFC-12 plant operating in March and shutdown from early August until late November. They only operated 6 days in their November accounting period and CTC yield, was very poor. As explained to us it was the result of several leaks during startup after the prolonged shutdown. This slightly impacted their yearly CTC ratio and yields vs prior year performance; 90.0% CTC yield in 2005 vs. 90.7% in 2004. Their export sales of 423.4 MT is comparable to recent historical levels of 292.6 MT in 2004, 801 MT in 2003 and 455 MT in 2002. Total 2005 sales of 1,165 MT reduced their inventories by 260 MT to an ending CFC-12 inventory of 380 MT.

The Team is satisfied that Dongyang's 2005 CFC-12 production and CTC plus HF consumption are correct as reported to SEPA.

Sunday, February 12 – Zhejiang Linhai Limin Chemical

100 TPA CFC-13
26,000 TPA HCFC-22 (10,000+ two 8,000 MT Units)

General

Several years ago the city government told Linhai Limin that they must plan on stopping chemical manufacturing at this plant site since it reside in a residential area. In 2004 they built a 10,000 MT HCFC-22 plant at a new site about 25 minutes from this location. Limin was advised that all chemical manufacture must cease by year end 2005 at this old site.

One of the 8,000MT HCFC-22 units was relocated to the new site during 2005 and parts of the 2nd 8,000 MT unit were also relocated and combined with some new equipment to establish the 2nd 8,000 MT unit at the new site. The old HCFC-22 structures are stripped bare of equipment, but tankage still exists on the old site.

The CFC-13 plant was moved to the new site in September of 2005 utilizeing the old distillation system combined with a new reactor and piping; which had developed serious leaks causing poor yields in May, July and September of 2005.

The existing site will be kept for prospective non-chemical activity in the future.

Verification of 2005 CFC-13 Data

Limin purchases feedstock CFC-12 from Juhua using a government issued permit restricting 2005 purchases to 57 MT. Four CFC-12 procurements were made from Juhua for feedstock use. Limin continues to purchase CFC-12 on the open market to meet loyal customer's needs. All these CFC-12 purchases were verified by the Team's Accounting member.

CFC-12 feedstock consumption is recorded for each shift on a shift log sheet. The Accounting office copies these shift consumption figures to a daily record showing cumulative CFC-12 feedstock consumption in addition to the total daily use. The daily and monthly totals were checked for all operating months and found to be accurate.

The above mentioned plant log sheets were also used to verify the number of operating days. One day adjustments were made in two months since CFC-12 feed was discontinued for 1-2 shifts in some days. Year 2005 operating days totaled 177.

All CFC-13 product is typically packaged into 8 and 35 kg cylinders. We examined all cylinder filling records and corresponding transfer slips from production to the warehouse and found reported production of 20.29 MT of CFC-13 to be correct and slightly less than there 20.35 MT quota.

We explored the reasons for very poor CFC-12/CFC-13 ratios in May, July and September. In July there were reactor leaks that went undetected for a few days. June was back to normal but in a short run in July they again experienced poor performance that they were unable to pinpoint until they restarted in September. At this time they determined that there were pinhole leaks in some piping that were difficult to detect because of insulation covering the piping (in our opinion the use of a halide leak detector would have found such leaks as this is common practice in refrigeration service). At this point they decided to shutdown the old unit and remove the distillation system to the new plant site and combine it with a new reactor system.

Monday, February 13 – Zhejiang Chemical Industry Research Institute (ZCRI)

150 TPA CFC-114/115

General

ZCRI have switched from CFC-113 to CFC-113a as feedstock, which they produce in part as well as purchase from Changshu 3-F. This satisfies China's solvent sector plan which limits use of purchased CFC-113 as feedstock, as well as provides improved yields to CFC-114 and CFC-115.

While ZCRI did not produce any CFC-114 in 2004 (used their quota to increase CFC-115 production in 2004) they used their entire eleven ODP tonnes CFC-114 quota in 2005 to meet the much higher 2005 sales demand (25.2 MT) and ensure some year end 2005 inventory.

Verification of Year 2005 CFC-114/115 Data

CFC-114

ZCRI produced CFC-114 for two months in 2005 fulfilling their 11 ODP tonnes quota. Verification was done by checking cylinder filling records as well as cylinder transfer slips from production to the warehouse. Cylinder filling records show a) cylinder I.D. number, b) gross wt. c) net wt. d) tare wt. and e) person filling the cylinders. They produced four cylinders in June and five in July. Both sets of records were verified as correct.

CFC-115

ZCRI produced their entire 72 ODP tonnes (120 MT) quota of CFC-115 in seven months; March thru September, a total of 197 operating days (spent eight days in February heating equipment and establishing feeds and inventory levels before actual production occurred in March).

Cylinders filling records and transfer slips are identical to those used for CFC-114, and all seven month's CFC-115 data were checked and found to be correct.

CFC-113a and AHF Feed Stock Consumptions

Raw material consumption for the individual CFC products is allocated by molar ratio since CFC-114 and CFC-115 are co-produced.

CFC-113a receipts from the warehouse document transfers to the CFC production plant. Unused CFC-113A is transferred back to the warehouse by a paper transaction at month end so that monthly consumption is the net transferred. All data was verified as correct.

AHF used by CFC-114 and CFC-115 is separated from other plant uses of AHF. Similar documentation to CFC-113a is used for AHF. All transfers were verified as correct as well as the reported AHF consumption figures.

Our Accountant Team member worked independently of our plant verification effort in ZCRI's Accounting facilities at a different location.

We were satisfied that ZCRI are in full compliance with their 2005 CFC production commitments.

February 14 -16 – Jiangsu Changsu 3F Refrigerant Co. Ltd.

10,000 TPA CFC-11
5,000 TPA CFC-12
4,000 TPA CFC-113
400 TPA CFC-115
15,000 TPA AHF (single line new plant)

General

Changshu 3-F has started up a new single line 15,000 TPA AHF line at their new Fluorocarbon plant site that supports their alternative fluorocarbon facilities. When the remaining CFC facilities are closed in 2007 at the existing refrigerant site, it will become primarily a fine chemical plant.

Verification of Year 2005 CFC Production Data

CFC-11

The CFC-11 plant operated eleven months (285 days) and was down by early December having produced 4950.56 MT vs. their 4951 MT quota in 2005.

Verified monthly and yearly production to be correct as reported to SEPA, by examining all drum filling records and transfer slips documenting movement from production to the warehouse. The transfer slips are in bound pads where the copy and original remain in the pad. In addition they prepare a container filling slip, a slip documenting transfer of filled containers to the warehouse and receipt of these containers by the warehouse. This year we checked the three transfer receipts and found them to be 100% accurate.

CTC for CFC-11 is via pipeline from the warehouse bulk storage into one of two level tanks which in turn feed the four (4) CFC-11 reactor feed tanks. All pipeline transfers are recorded in a bound notebook and transfer slips created for each transfer into the production unit. All CTC transactions were verified to have been accurately reported.

HF for CFC-11 is transferred via pipeline into the weigh tanks where typical transfers are increments of 1 MT. All monthly transfers were checked and found to be accurate. Examined January CFC-11 reactor logs and all were properly filled out and supported reported operating days. (There were only 14 hours all month when both reactors were without feeds for minor problems)

CFC-12

The CFC-12 plant operated 334 days over twelve months, producing 3,822.47 MT vs. their 3,823 MT quota in 2005. The year's campaign was finished by early December.

The CTC, AHF and CFC-12 records and transfer slips are identical to the CFC-11 plant and as with CFC-11 we chose to verify CFC-12 production by checking the set of 3 transfer slips. We note they still have cylinder filling records recorded in a bound note pad. These slips show serial number, tare weight and net weight. There are usually one - two such slips per day depending upon the number of packaged units. When filling DAC's they record weight by lots in increments of 5; i.e. 40, 45, 50 etc. Totals from these filling records are entered into the daily transfer slips.

HF for CFC-12 is via pipeline into two parallel weight tanks and are typically in 1 – 1.1 MT increments. All HF transfer slips were added for each month and agreed with reported totals. At shutdown of the old AHF facilities they discovered 12 MT of excess stock; this was transferred to the CFC-12 plant at no charge and gave them a better than theoretical ratio in June; the month when adjustment was made.

CTC consumed for CFC-12 production was verified by adding all transfer slips for each month. At month end they misread the CTC level figures in February, May and June; under reporting CTC use. The error was discovered late in 2005 and corrected by adding the under reported CTC amount to December. This distorted the respective CTC ratios for these four months, but the annual ratio is correct. Examined December reactor log sheets for CFC-12 and confirmed at least one reactor (out of two) operated each of the 17 days before shutdown.

CFC-113

Since 2005 was last year for CFC-113 production and they only operated two months to produce 686.63 MT against their 687.5 MT (550 ODP tonnes) quota, a total of 51 days. The plant was shutdown February 24, 2005 for its final time.

We examined all plant shift log sheets for the 51 days of operation and found only 9½ hours of time when feeds were not on one of the 2 reactors; hence reported operating days were verified as correct.

Verified CFC-113 drum filling records and transfer slips as accurately reported.

PCE is imported via drums and bulk into bulk storage, then transferred via level tank readings to the CFC-113 plant. Transfers and consumption figures were verified as accurately reported. We found an entry error (440 kg too low) in the bound notebook, but transfer slips and Financial records were correct.

HF transfers are via pipeline from plant bulk storage. Documentation is identical to other CFC operations. All transfer and consumption data were verified as correctly reported.

CFC-113 Plant Closure

Plant Closure Project will be in next year's report, however, the plant has been dismantled and we viewed the plant and reviewed photos provided to SEPA. They are already using the vacated building to expand the adjacent CFC-113a & CTFE facilities.

CFC-115 Verification

CFC-115 cylinders are typically filled to 500kg exact weights making verification easy. They operated only four months or 114 days with shutdown April 21st until year end. They produced 99.2 MT of CFC-115 vs quota 60 ODP tonnes (100 actual MT).

Beginning in 2004 CFC-113 produced from their original CFC-113 unit was for solvent sales and process agent use only. Feed stock for CFC-115 and other site CFC based products was supplied from their new CFC-113/CFC-113a/CTFE unit.

Monthly cylinder filling records for CFC-115 were examined for each month and reported figures were correct as reported.

CFC-113 is transferred from the new CFC-113/CFC-113a unit to CFC-115 plant via a 5 m^3 portable tank transported by forklift. Transfer quantities are typically 3.5 MT and all monthly transfer and consumption figures were verified as accurately reported.

AHF is supplied in cylinders, typically exact 400kg quantities. All transfer and consumption figures were verified as accurately reported.

Thursday, February 3 – Jiangsu Meilan Chemical Co. Ltd.

3,000 TPA CFC-11
3,000 TPA CFC-12
40,000 TPA HCFC-22
16,000 TPA AHF
130,000 TPA Chloromethanes (CMs)

General

Last year's report mentioned that Meilan were developing a modest temperature catalytic process to convert future excess CTC in the presence of methanol to form methyl chloride, CO_2 and HCl. They retrofitted their original 30,000 TPA CMs plant to apply this technology. The plant ha operated technically successfully over the past six months and the capacity achieved conversion of 8,000 TPA of CTC.

They are constructing a new 100,000 TPA CMs plant along with their existing 50,000 and 80,000 TPA CMs plants.

Verification of 2005 Production Data

CFC-11

They produced CFC-11 four (4) months, March, April, May, and December; operating only 55 days while producing 676.25 MT vs. their 677 MT quota. This year's production was increased from 642.56 MT in 2004 when their quota was 643 MT, as their CFC-12 production was significantly reduced.

Based on prior year's experience we used the CFC-11 plant distillation (shift) log sheets as the primary verification document, adding each shift's production for each month. All log sheet figures were verified to match reported monthly figures. We cross-checked transfer slips from production to the warehouse as well as checked drum filling records, which are recorded in a bound notebook; all checked to be correct. Drums are all 250 kg and there usually are no bulk shipments.

CTC is transferred via pipeline to two day tanks and then to two sets of feed tanks for use in either the CFC-11 or CFC-12 plants. A transfer slip is generated for each transfer and all were verified as accurate. A paper accounting transfer back to the CTC warehouse occurs at month-end and is reversed at the beginning of the next month. Thus the net transfer figure is the CTC consumed in the month. The plant log sheets also show CTC consumption for each shift and we added these figure for each of the four months and found agreement to official figures.

AHF is transferred via pipeline to a weigh tank then to the process. A transfer slip is created for each transfer. We also added shift consumption figures and then cross checked transfer slips. All monthly transfers were correct.

CFC-11 domestic sales in 2005 at 595 MT were down from 952 MT in 2004. No exports in 2005.

CFC-12

Meilan typically package all CFC-12 into returnable cylinders, no DAC's. However, they did fill a couple of tank trucks in 2005. Cylinder sizes in 2004 were 400, 450, 500, 1000, 500 and 1100 kg.

All cylinder fillings are recorded in detailed log sheets, which we added up for each month and adjusted for starting and ending bulk stocks. The net figure matched annual production exactly. They fill cylinders most months but only operated three months; hence, monthly cylinder filling records are not used to determine monthly production. We verified individual monthly production by adding up each shifts' production from the distillation log sheets; all figures were verified as accurately reported.

They operated only 68 days in approximately three to four week campaigns producing 610.96 MT vs. their 612 MT quota; down from their 1240 MT quota in 2004. CFC-12 domestic sales were 732 MT, exceeding production by 121 MT.

As discussed in the CFC-11 section CTC and AHF transfers are handled identically in both plants. All CTC and HF figures were verified as correctly reported.

Meilan continues to be one of the easiest plants to verify, as their records are very complete.

Annex III

Financial Verification
of
CFC production in China in 2005

1. From February 8th to 22nd, 2006, a mission comprising Messrs. Tony Vogelsberg (team leader/technical expert), Hua Zhangxi (HZX, technical expert), and Wu Ning (financial consultant) to carry out the verification of CFC production in China in 2005 in accordance with the CFC Production Sector 2005 annual programme. The mission was accompanied by the representative from State Environmental Protection Agency (SEPA). The mission visited the following plants/company/institute:

(i) Zhejiang Juhua Fluoro-Chemical Co. Ltd. (CFC 11, CFC 12),
(ii) Zhejiang Dongyang Chemical Plant (CFC 12),
(iii) Zhejiang Linhai Limin Chemical Plant (CFC 13),
(iv) Zhejiang Chemical Industry Research Institute (CFC 114, CFC 115),
(v) Jiangsu Changshu Ref. Plant-Changshu 3F (CFC11, CFC12, CFC113 & CFC115), and
(vi) Jiangsu Meilan Electro-Chemical Plant. (CFC 11, CFC 12).

2. Based on the experience gained from previous verifications, the mission split into a technical group and a financial group and held separate discussions with each CFC production plant/company/institute concurrently during the verification. This report only covers the financial verification of each CFC production plant/company/institute, which follows the Guidelines and Standard Format for Verification of ODS Production Phase-out[1] (Guidelines).

3. In addition to the Guidelines, the financial verification was done under the following assumptions due to the tight schedule of the mission agreed by Ms. Helen Chan, Task Team Leader, EASEN, the World Bank:

(i) The plants/company/institute understood the importance of this verification, and
(ii) The plants/company/institute provided completed documents and information needed for this verification.

4. Like the verification in 2005, this verification exercise was conducted ahead of the annual national audit of the CFC production sector by China National Audit Office (CNAO). The mission had no CNAO's documentation and reporting as reference to follow. Therefore, necessary financial records and original documents covering the following aspects were checked:

(i) Production of each CFC,
(ii) Procurement and production of raw materials for CFC production (including CTC, AHF, CFC12, CFC 113a, and PCE), and
(iii) Consumption of raw materials (including CTC, AHF, CFC 113a, CFC 12, and PCE).

5. Before the verification, each plant/company/institute filled in questionnaires and submitted them to HZX through SEPA. Necessary clarifications were requested by HZX and feedbacks were given by relevant plants/company/institute.

6. The findings of financial verification are summarized as follows:

- **Zhejiang Juhua Fluoro-Chemical Co. Ltd. (CFC 11, CFC 12)**

7. Zhejiang Juhua Fluoro-Chemical Co. Ltd. (Juhua) was verified on February 9, 2006.

8. Juhua produced CFC 11 and CFC 12 in 2005. CFC 11 and CFC 12 are produced by the No. 3 workshop of Juhau. The production of CFC 11 and CFC 12 was entered into the ERP system and automatically transferred to accounting system. By the end of each month, No. 3 workshop prepared and submitted its monthly *Raw Material*

[1] UNDP/Ozl.Pro/Excom/32/33 of October 24, 2000, adopted as Decision 32/70 at the 32nd Excom Meeting.

Consumption Calculation Report to the accounting office of Juhua based on its daily records. This report provided the information for CFC 11 and CFC 12 production, beginning stocks of AHF and CTC, consumption of AHF and CCL_4, and closing stocks of AHF and CTC. This report was used to check the accuracy of the ERP system. During the verification, the data in the report were reconciled with Juhua's accounting records and the data reported to SEPA by Juhua before the verification. It is concluded that the accounting records reflect the production of CFC 11 and CFC 12 in Juhua. The following table shows the production of CFC 11 and CFC 12 produced by Juhua from 2000 to 2005:

CFC 11 and CFC 12 Productions by Juhua from 2000 to 2005 (MT)

	2000	2001	2002	2003	2004	2005
CFC 11	4,338.8	4,826.3	4,489.0	3,947.5	3,325.1	2,667.6
CFC 12	7,758.7	7,706.3	7,157.0	7,406.0	6,232.8	4,382.4

9. In addition to producing CFC 12 as commodity, Juhau also produced CFC 12 for Zhejiang Linhai Limin Chemical Plant (Linhai) as feedstock for CFC 13 production. The following table presents the CFC 12 production for Linhai.

CFC 12 Production for Linhai as Feedstock of CFC 13 (MT)

	2003	2004	2005
CFC 12 as Feedstock of CFC 13 for Linhai	58.0	56.6	57.0

10. In 2005, CFC 11 and CFC 12 produced by Juhua were sold not only in domestic market, but also in overseas markets. CFC 11 was exported to Russia, Indonesia, and United Arab Emirates while CFC 12 was exported to Indonesia, Vietnam, Malaysia, Russia, Bengal, Iran, Philippines, and Egypt. All exports were licensed by the SEPA Import/Export Office.

11. Juhua produced their required CTC for its CFC production in 2005 and produced and purchased their AHF. In 2005, Juhua added 9,482.14 MT of CTC and 2,053.88 MT of AHF for CFC 11 and CFC 12 production. The addition of CTC and AHF for CFC 11 and CFC 12 production was entered into the ERP system and automatically transferred to accounting system. The consumption of CTC and AHF for CFC 11 and CFC 12 production was manually calculated and then entered into the ERP system by No. 3 workshop. The consumption data was transferred to accounting system. The following table shows CTC and AHF consumed by CFC 11 and CFC 12 production in 2005:

CTC and AHF Consumed by CFC 11 and CFC 12 Productions in Juhua in 2005

Consumed by	CTC	AHF
CFC 11	3,279.32 MT	429.95 MT
CFC 12	6,116.36 MT	1,605.35 MT
Total	9,395.68 MT	2,035.30 MT

- **Zhejiang Dongyang Chemical Plant (CFC 12)**

12. Zhejiang Dongyang Chemical Plant (Dongyang) was verified on February 11, 2006.

13. Dongyang produced CFC 12 in 2005. By the end of each month, the CFC 12 production unit in Dongyang submitted its Production Transfer Slips to the accounting office. These slips were signed by the CFC 12 production unit. These slips indicated the production of CFC 12 every day and became the supporting documents for accounting records. All of these Production Acceptance Slips were verified and it is concluded that the accounting records are consistent with the data reported to SEPA by Dongyang before the verification. The following table shows the production of CFC 12 by Dongyang since 2000.

CFC 12 Productions by Dongyang from 2002 to 2005 (MT)

	2000	2001	2002	2003	2004	2005
CFC 12	2,218.3	2,218.8	1,740.7	1,442.2	1,213.1	898.2

14. The overseas markets of CFC 12 produced by Dongyang in 2005 included Bengal, Indonesia, Nigeria,

Saudi Arabia, Thailand, and Vietnam. The exports of CFC 12 were made by Dongyang itself. All exports were licensed by the SEPA Import/Export Office. Each shipment had its separate license.

15. During the verification, the purchased and consumption of CTC was verified. The accounting records were supported by the Raw Material Transfer Slips for CTC purchase and by the Raw Material Delivery Slips for CTC consumption. All these slips were reconciled with the data reported to SEPA by Dongyang before the verification and the results are satisfactory. However, the quantity of CTC purchase did not include the compensation to the transportation losses given by one of its CTC suppliers[2]. In 2005, Dongyang produced all AHF for its CFC 12 production. The consumption of AHF for CFC 12 production in 2005 was documented on HF Allocation Slips and the slips were verified. From the point of view of accounting, the quantity of AHF consumption was the quantity of AHF added to CFC 12 production. The following table gives consumption of CTC and AHF for production of CFC 12 by Dongyang.

CTC and AHF Consumed by CFC 12 Production in Dongyang in 2005

Consumed by	CTC	AHF
CFC 12	1,267.93 MT	405.29 MT

16. In 2005, Dongyang sold 0.7 MT of CTC to one company as a cleaning agent. This is not legal and they realized after the fact that this is the case; and will no longer do it.

- **Zhejiang Linhai Limin Chemical Plant (CFC 13)**

17. Zhejiang Linhai Limin Chemical Plant (Linhai) was verified on February 12, 2006.

18. Linhai produced CFC 13 in 2005. CFC 12 production facilities were dismantled in 2002. Therefore, Linhai purchased CFC 12 as feedstock for CFC 13 from Juhua. The accounting records of CFC 13 production in 2005 were supported by the Warehouse Acceptance Slips. The figures on these slips were consistent with the data reported to SEPA by Linhai before the verification. The following table shows the production of CFC 12 and CFC13 by Linhai since 2000.

CFC 12 and CFC 13 Productions by Linhai from 2000 to 2005 (MT)

	2000	2001	2002	2003	2004	2005
CFC 12	1,364.8	1,364.9	961.6	0	0	0
CFC 13	27.0	27.0	27.0	21.3	20.8	20.3

19. In 2005, Limin exported 350 kg of CFC 13 to Israel, together with export of CFC 23.

20. Since the production facilities of CFC 12 were dismantled in 2002, the production quota of CFC 12 by Linhai was reallocated to Juhua by Chinese Government. Therefore, the production of CFC 12 for Linhai by Juhua is treated as feedstock of Linhai. Linhai in 2005 purchased 57 MT of CFC 12 as feedstock for CFC 13, which were supported by the Material Acceptance Slips. However, only 54 MT of CFC 12 was delivered to Linhai since the last 3 MT of CFC 12 was purchased on the last date of 2005, which was included in the purchase of CFC 12 in 2006.

21. In addition to the feedstock of CFC 12, Linhai also purchase 147.22 MT of CFC 12 as commodity. 3 MT of CFC12 was used as feedstock to produce CFC 13 instead of one from Juhua. The consumption of CFC 12 for CFC 13 production was verified and the result is satisfactory.

22. Linhai also exported 81.2384 MT of CFC 12 in 2005, including 49.9584 MT to Israel and 31.28 MT to Egypt (recovered or recycled from returned cylinders).

- **Zhejiang Chemical Industry Research Institute (CFC 114, CFC 115)**

23. Zhejiang Chemical Industry Research Institute (Zhejiang Chemical) was verified on February 13, 2006.

[2] This compensation to transportation losses (6.73 MT) was verified by CTC Verification Team in January 2006.

24. Zhejiang Chemical produced CFC 114 and CFC 115 in 2005. The production of CFC 114 was reflected in the Product transfer Slips, and the production of CFC 115 was reflected in the Semi-product transfer Slips, both were delivered to the accounting office in Zhejiang Chemical by the end of each month. The following table shows CFC 114 and CFC 115 production by Zhejiang Chemical from 2000 to 2005.

CFC 114 and CFC 115 Productions by Zhejiang Chemical from 2000 to 2005 (MT)

	2000	2001	2002	2003	2004	2005
CFC 114	7.3	6.8	29.0	0	0	11.0
CFC 115	119.6	127.0	90.0	131.8	138.3	120.0

25. About half of the sales of CFC 114 produced by Zhejiang Chemical were sold in domestic market in 2005 and another half of sales were to Egypt, Argentina, and Kuwait. In 2005 most of CFC115 produced by Zhejiang Chemical was blended to R502 in 2005 and only 5.7536 MT of CFC 115 were sold, including 3.84 MT to Egypt.

26. Zhejiang Chemical in 2005 produced 1,157.763 MT of CFC 113a and purchased 168.5 MT from Changshu 3F. It also purchased AHF in 2005. The portion of CFC 113a and AHF transferred to produce CFC 114 and CFC 115 were documented on Material Delivery Slips. These Slips were delivered to the accounting office in Zhejiang Chemical by the end of each month for financial records. The verified consumptions of CFC 113a and AHF were shown in the following table.

CFC 113a and AHF Consumption by CFC 114 and CFC 115 in Zhejiang Chemical in 2005

Consumed by	CFC 113a	AHF
CFC 115	168.5 MT	40.0 MT

- **Jiangsu Changshu Ref. Plant-Changsu 3F (CFC11, CFC12, CFC113 & CFC115)**

27. Jiangsu Changshu Ref. Plant-Changsu 3F was verified from February 14 to 16, 2006.

28. Changshu 3F produced CFC 11, CFC 12, CFC 113, and CFC 115 in 2005. The productions workshops for CFC 11, CFC12, CFC113, and CFC 115 prepared the Monthly Production Reports based on daily records by the end of each month. These reports summarized the production of CFC 11, CFC 12, CFC 113, and CFC 115, and the consumption of CTC, AHF, CFC 113 and PCE. These reports were submitted to accounting office of Changshu 3F for financial records. The following table shows the production of CFC 11, CFC 12, CFC 113, and CFC 115 from 2000 to 2005.

CFC 11, CFC 12, CFC 113, and CFC 115 Productions by Changshu 3F from 2000 to 2005 (MT)

	2000	2001	2002	2003	2004	2005
CFC 11	8,192.0	8,221.9	10,231.9	8,883.7	6,682.3	4,950.6
CFC 12	5,019.0	5,075.0	3,034.7	4,334.8	4,639.4	3,822.5
CFC 113	3,445.0	3,375.0	2,750.0	2,124.9	1,374.2	686.6
CFC 115	100.0	50.0	100.0	179.9	179.7	99.2

29. The production of CFC 113 only refers to the commodity.

30. In 2005, 101.9 MT of CFC 115 was blended to R502.

31. The overseas customers bought CFC 11, CFC 12, CFC 113, and CFC 115 from Changshu 3F in 2005 included Chile, Indonesia, United Arab Emirates, Korea, Philippines, Nigeria, Pakistan, Vietnam, Singapore, Bangladesh, USA (Du Pont), Malaysia, and the Netherlands (resold to Africa), etc.

32. Changshu 3F purchased CTC, AHF and PCE and also produced AHF in 2005. These purchases were supported by the Material transfer Slips issued by the warehouse. The production of AHF was documented by the Monthly Production Reports. The consumptions of CTC, AHF, CFC 113, and PCE were reflected in the Monthly Production Reports prepared by CFC production workshops. The verified consumption of CTC, AHF, CFC 113, and PCE are shown in the following table:

CTC, AHF, CFC 113 and PCE Consumed by Changshu 3F in 2005 for ODS Production

Consumed by	CTC	AHF	PCE	CFC113
CFC 11	5,912.7 MT	742.9 MT		
CFC 12	5,063.4 MT	1,489.9 MT		
CFC 113		318.6 MT	692.0 MT	
CFC 115		64.9 MT		162.0 MT
Total	10,976.1 MT	2,616.3 MT	692.0 MT	162.0 MT

- **Jiangsu Meilan Electro-Chemical Plant. (CFC 11, CFC 12)**

33. Jiangsu Meilan Electro-Chemical Plant (Meilan) was verified on February 17, 2006.

34. Meilan produced CFC 11 and CFC 12 in 2005. The Production Transfer Slips were prepared by CFC production unit at the end of each month before April 2005. From May 2005, the ERP system was launched in Meilan and all production data was entered into the ERP system by CFC production unit and then transferred to accounting system for financial records. The following table shows the verified production of CFC 11 and CFC 12 since 2000.

CFC 11 and CFC 12 Productions by Meilan from 2000 to 2005 (MT)

	2000	2001	2002	2003	2004	2005
CFC 11	1,049.8	1,049.7	1,049.7	997.1	642.6	676.3
CFC 12	1,793.0	1,792.9	1,314.7	1,066.0	1,238.7	611.0

35. In 2005 Meilan did not export any CFC 11 and CFC 12.

36. In 2005, Meilan produced all CTC for its CFC production. The total production of CTC by Meilan in 2005 was 4,320 MT and only transferred 766.6152 MT to produce CFC. Meilan also produced 8,095.2 MT of AHF and purchased 6,061.6 MT of AHF in 2005. The Material Transfer Slips issued by CFC production unit before April 2005 and the Material Consumption Records produced by ERP system after May 2005 reflected the consumption of CTC and AHF. The following table gives the consumption of CTC and AHF in 2005.

CTC and AHF Consumed by Meilan in 2005

Consumed by	CTC	AHF
CFC 11	808.8 MT	123.8 MT
CFC 12	864.6 MT	260.6 MT
Total	1,673.4 MT	384.4 MT

Wu Ning
Financial Analyst
Verification Team of CFC Production in China in 2005
February 22, 2006