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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Fifty-second Meeting
Montreal, 23-27 July 2007

PROJECT PROPOSAL: CHINA

This document consists of the comments and recommendations of the Fund Secretariat on the following project proposal:

Foam

- Sector plan for phase-out of CFC-11 in the China foam sector: 2007 annual programme World Bank

Fumigant

- National phase-out of methyl bromide (phase II, second tranche) Italy and UNIDO

Process agent

- Sector plan for phase-out of ODS process agent applications (Phase II) and corresponding CTC production: 2007 annual programme World Bank

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**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS
CHINA**

PROJECT TITLE**BILATERAL/IMPLEMENTING AGENCY**

Sector plan for phase-out of CFC-11 in the China foam sector: 2007 annual programme	World Bank
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NATIONAL CO-ORDINATING AGENCY:

SEPA/FECO

LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT**A: ARTICLE-7 DATA (ODP TONNES, 2005, AS OF MAY 2007)**

CFC	13,123.8		
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B: COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES, 2005, AS OF MAY 2007)

ODS	Aerosol	Foam	Ref. Mfg.	Ref. Ser.	MDI	Tobacco fluffing	Solvent	Process agent
CFC-11	102	6,085.3	366.4	240.0	65.0	128.0		
CFC-12	374.3	108.0	691.8	4,065.6	221.0			
CFC-113							546.1	3.2
CFC-115				129.2				

CFC consumption remaining eligible for funding (ODP tonnes)

n/a

CURRENT YEAR BUSINESS PLAN: Total funding US \$4,843,000: total phase-out 1,167 ODP tonnes.

PROJECT DATA		2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
CFC-11 (ODP tonnes)	Montreal Protocol limit	57,819	57,819	57,819	28,910	28,910	8,673	8,673	8,673	0	
	Annual consumption limit	14,143	13,830	10,500	9,000	7,000	400	0	0	0	
	Annual phase-out targets in PU foam sector	0	313	3,330	1,500	2,000	6,600	400			14,143
Final project costs (US \$):											
Funding for Lead IA: World Bank											
Total project funding		9,940,000	12,570,000	10,903,000	10,903,000	3,320,000	2,676,000	1,767,000	1,767,000	0	53,846,000
Final support costs (US \$):		886,600	1,115,300	961,270	961,270	282,800	240,840	159,030	159,030	0	4,766,140
Support cost for Lead IA: World Bank											
Total support costs											
TOTAL COST TO MULTILATERAL FUND (US \$)		10,826,600	13,685,300	11,864,270	11,864,270	3,602,800	2,916,840	1,926,030	1,926,030	0	58,612,140
Final project cost effectiveness (US \$/kg)											n/a

FUNDING REQUEST: Approval of funding for the sixth tranche (2007) as indicated above.

SECRETARIAT'S RECOMMENDATION

For individual consideration

PROJECT DESCRIPTION

1. On behalf of the Government of the People's Republic of China (China), the World Bank has submitted to the 52nd Meeting of the Executive Committee a request for approval of the 2007 annual implementation programme (AIP) for the CFC-11 phase-out in the polyurethane (PU) foam sector in the China. The World Bank submitted this request in advance of one for the release of the sixth funding tranche, since the prerequisite conditions for tranche approval have not yet been met. The World Bank has also submitted a request for an amendment to the AIPs for 2005 and 2006, approved at the 44th and 47th Meeting, respectively, in order to allow enterprises with capacity installed after July 1995 to be eligible for support under the agreement. Decision 51/12 "requests implementing agencies to seek authorization from the Executive Committee prior to using the flexibility provided for under multi-year agreements to allow funds to be directed to enterprises established after July 1995 in cases where countries had committed to the total phase-out of the ODS concerned." The World Bank is requesting authorization to allow the direction of funds to enterprises established after July 1995, but before 7 December 2001.

Background

2. The CFC-11 phase-out in the polyurethane foam sector in China was approved at the 35th Meeting of the Executive Committee, with the World Bank as the implementing agency and the State Environmental Protection Agency (SEPA) as the national implementation agency. The implementation of the CFC-11 phase-out in the polyurethane foam sector supports the Government of China in meeting its Montreal Protocol obligations, including the complete phase-out of the controlled use of CFCs by 2010. In order to achieve these targets, a series of investment, non-investment, technical assistance and capacity building activities will be, and are being, implemented by China with the assistance of the World Bank. The total funds approved in principle for the plan amounted to US \$53,846,000 plus agency support costs of US \$4,766,140.

3. In 2005, China's national CFC-11 consumption was 6,986.6 ODP tonnes, of which 6,085.3 ODP tonnes were CFC-11 consumption in the polyurethane foam sector. Both consumption levels were within the control limits set out in the agreements for the CFC-11 phase-out in the polyurethane foam sector and the accelerated phase-out plan. An overview over the control targets and the related funding schedule are provided in Table 1 below.

Table 1Control targets for CFC-11 consumption in the polyurethane foam sector in China (ODP tonnes) and related funding schedule (US \$ '000)

	2005	2006	2007	2008	2009	2010	Total**
Annual national CFC-11 consumption limit (ODP tonnes)	10,400	7,700	4,130	3,800	300	0	
Annual CFC-11 consumption limit in PU foam sector*(ODP tonnes)	9,000	7,000	400	0	0	0	
Annual CFC-11 phase-out targets in PU foam sector (ODP tonnes)	1,500	2,000	6,600	400			14,143
Total annual funding (US \$ X 1,000)	10,903	3,320	2,676	1,767	1,767		53,846
Programme support cost (US \$ X 1,000)	961.27	282.8	240.84	159.03	159.03		4,766.14
Total cost to the Multilateral Fund (US \$ X 1,000)	11,864.27	3,602.8	2,916.84	1,926.03	1,926.03		58,612.14

* Figures for annual CFC-11 consumption limits in PU foam sector for 2004-2010 are based on limits agreed under the APP.

** Years 2002-2004 not shown, but included in total

4. The release of the funds is subject to the following:

(a) Confirmation that:

- (i) All agreed phase-out targets and consumption limits for the previous year have been achieved;
- (ii) It has been verified that the activities planned for the previous year were undertaken in accordance with the AIP;
- (iii) CFC phase-out contracts have been signed, amounting to at least 50 per cent of the current year contract targets and 100 per cent of the previous year contract targets.

(b) Confirmation of performance through verification by site inspection of a minimum of 15 per cent of the conversion activities, accounting for a minimum of 15 per cent of the CFC consumption of the AIP;

(c) Consumption figures provided under the Agreement are consistent with China's reports to the Ozone Secretariat under Article 7 of the Montreal Protocol.

5. The condition in paragraph 4 (a) above specifies that all agreed phase-out targets and consumption limits for the previous year are to be achieved. The agreed phase-out targets and consumption limits are:

- (a) Annual national CFC-11 consumption limit (ODP tonnes);
- (b) Annual CFC-11 consumption limit in PU foam sector (ODP tonnes);

- (c) Annual CFC-11 phase-out targets in PU foam sector (ODP tonnes).

The limits are shown in Table 1 above.

6. From the documentation submitted to this meeting, as well as previous documentation submitted before the 51st Meeting, it became evident that an important part of the preconditions set by the Agreement for submission of the 2007 tranche have not been fulfilled. So far only a fraction of the ODP phase-out contracts for 2005 have been signed. The World Bank believes that the remaining contracts for 2005 will be signed by mid-2007. Also, no contracts so far have been signed in the 2006 AIP, as all efforts were spent in fulfilling the 2004 and 2005 AIPs targets. However, in order to release the 2007 tranche, 50 per cent of the contracts foreseen in the 2006 AIP have to be signed, representing a further 300 ODP tonnes.

7. The World Bank informed the Secretariat before the 51st Meeting that the fulfilment of the target in terms of contracts signed for 2006 and subsequent years will be very challenging, if the modality of implementation is not broadened. The Executive Committee accordingly decided in decision 51/28 to specify that, for the purpose of the AIP for 2007 and following years under the China foam sector plan, the term “CFC phase-out contracts” shall include contracts signed with the Environmental Pollution Bureau of either provinces or very large municipalities. The Executive Committee further defined a number of conditions for such contracts in the same decision.

Submission to the 52nd Meeting

8. The submission of the World Bank to the 52nd Meeting includes a report regarding the implementation of the project up to spring 2007, and an AIP for 2007. As part of the submission, the World Bank requests authorization to direct funds to PU foam enterprises consuming CFC-11 established before 7 December 2001 but after the cut off date for eligibility purposes of July 1995. The rationale for the selection of that date is that China’s foam sector plan was approved on that date. The World Bank requests approval to use these expanded eligibility criteria for the completion of the 2005 and 2006 AIPs, as well as for the 2007 AIP submitted to this meeting in order to achieve complete phase out of CFC-11 in this sector.

9. The remaining contracts to be signed for completion of the 2005 work programme address 1,120 ODP tonnes of CFC consumption (status April 2007). In order to release the 2007 tranche a further 50% of the phase-out contracts for the year 2006 have to be signed. Therefore, the total number of contracts still to be signed before the 2007 tranche can be released address 1,420 ODP tonnes.

10. As is apparent from Table 2, an excerpt from the project document, the World Bank on behalf of China requests change of the already approved AIPs for the years 2005 and 2006.

Table 2CFC-11 covered by contracts in the 2002 to 2006 Annual Implementation Programmes as of April 30, 2007 (in MT)

Year	CFC-11 PU consumption captured by contract		Cumulative CFC-11 PU consumption captured by contracts	
	Planned	Actual	Planned	Actual
2002	2,000	2,353.68	2,000	2,353.68
2003	2,500	2,677.33	4,500	5,031.01
2004	2,500	1,971.57	7,000	7,002.58
2005	2,500	1,377.67 +1,202* =2,579.67	9,500	8,380.25 +1,202* =9,582.25
2006	600	900**	10,100	10,482.25**
2007	551		10,651	
Total	10,651		10,651	10,482.25**

* Phase out contracts amount to 1,202 MT are ready to be signed waiting of ExCom permission to sign contracts with enterprises established after July 1995 but before December 2001 as requested in the submission of the 2007 AP.

** Additional 900 MT are in the process of being signed using the provincial approach as approved by ExCom at its 51st Meeting.

11. The report regarding the implementation of the 2002-2006 AIPs provides detailed insight into progress, implementation modalities and challenges. From 2002-2005 a modality was used where a number of eligible small foam plants with complete documentation were consolidated into large enterprises. Implementation of projects in these circumstances has been slow, and some enterprises had to subsequently withdraw. SEPA decided to discontinue this modality in early 2006, and instead moved to signing contracts with each foam enterprise on the basis of a new selection and approval process. SEPA identified 1,297 ODP tonnes of CFC-11 consumed by small foam enterprises established before July 1995, but found to be increasingly difficult to identify more eligible enterprises with sufficient documentation. At the end of December 2006, FECO signed contracts for phasing out 947 ODP tonnes, and will sign the remainder covering 350 ODP tonnes in early 2007. SEPA believes that, if its request for extending the eligibility date to 7 December 2001 is accepted, then using the provincial approach approved by the 51st Meeting of the Executive Committee it will be possible to fulfil SEPA's phase-out contract commitments for 2005, 2006 and 2007. SEPA is confident that all remaining phase out contracts could be signed within 2007.

12. In order to ensure the successful phase out of CFC production by 1 July 2007, SEPA identified three provinces and nine cities with high CFC consumption and encouraged them to complete their CFC consumption phase out by 1 July 2006. All HAD signed agreements with SEPA and took various measures to achieve the phase out. One common policy that all 12 provinces/cities have promulgated respectively is bans on production, consumption and sales of CFCs by 1 July 2006 within their administrative boundaries.

13. As of 30 April 2007, total contracts of 8,380 ODP tonnes of CFC-11 had been awarded in the 2002-2005 AIPs. The detailed status of the implementation for the ongoing AIPs is as follows:

- (a) In the 2005 AIP, four industrial consolidation phase-out contracts were signed in 2005 plus 37 individual projects. However, three industrial consolidation enterprises with a total ODS phase out impact of 596 ODP tonnes have withdrawn from their contracts in 2006 due to financial difficulties and intense competition, thus only one of those projects remains in this AIP. It includes 10 foam enterprises with a total consumption of 364.67 ODP tonnes and at a cost of US \$1,564,948. All CFC equipment has been dismantled and none are using CFC-11 any longer; this status has been verified. The procurement of equipment is ongoing.
- (b) The 37 individual contracts, leading to a phase out of 1,013.21 ODP tonnes, have been signed. Another 1,202 ODP tonnes of CFC-11 consumption have been identified, but 34 enterprises accounting for 1,078 tonnes were established between 25 July 1995 and 7 December 2001. Once these contracts can be signed, China will be able to fulfil the 2005 phase out target.
- (c) No contracts have been signed in the 2006 AIP as of yet, as SEPA concentrated on completing the 2004 and 2005 AIPs. With the combination of the enlarged eligibility and the provincial approach, the World Bank and SEPA are confident that all phase out contract commitments for 2006 and 2007 can be met. Contracts to fulfil the 2006 phase-out targets are prepared and can be signed in summer 2007, once approval of the Executive Committee for extending support to companies established after July 1995 has been obtained.
- (d) All technical assistance (TA) activities under the 2002 to 2004 AIPs have been completed; two TA activities were completed in 2005 AIP and the remaining two are under implementation. Regarding the 2006 AIP, the 2005 performance audit has been carried out. Activities for the training of personnel in the implementation of phase out activities, a standard formulation and revision for foam products (Phase IV), public awareness, consultant services and a study on the application of LCD technology in China have been prepared.

14. According to the requirement of the CFCs/CTC/Halon Accelerated Phase-out Plan (APP), which was approved in December 2004, the maximum allowable national CFC-11 consumption limit in 2007 will be 4,130 ODP tonnes. This target will be achieved through CFC production control in the CFC production sector and control of net imports. At the same time, the maximum allowable CFC-11 consumption limit in the PU foam sector in 2007 will be 400 ODP tonnes.

15. CFC-11 consumption will be banned in the foam sector on 1 January 2008 as stipulated in the CFC/CTC/Halon Accelerated Phase out Plan. Since conversion projects typically take more than three to four years, China is aware that the projects in the 2004-2005 AIPs may not be completed by the end of 2007. However, China will ensure that all CFC-11 equipment covered by the projects in the 2004- 2005 AIP will be disposed of or converted to non-CFC ones by the

end of 2007 to meet the phase out targets. It is envisaged that US\$2,676,000 will be allocated to PU foam enterprises with ODS phase out contracts signed in 2007, and to TA activities.

16. In 2007, the following Government actions among others are also planned to support program activities:

- (a) A new “ODS management regulation” has been under development since 2004, covering management and monitoring of ODS production, consumption, use, sale, import and export and the related legal liabilities. The new regulation is expected to be issued by the State Council in 2007.
- (b) Bans for achieving the phase out target of 2007 are prepared now and expected to be issued in 2007. This includes a ban for CFCs used in home appliances and the import and export of such CFC-based appliances, a ban on the consumption of CFC-11 in the tobacco sector, and a ban on the production of CFCs except for MDIs. Finally, a ban on the consumption of CFCs in the foam sector will be issued and effective on 1 January 2008.

17. Forty to 50 ODS phase out contracts will be signed with PU foam companies using CFC-11, phasing out a total consumption of 2,271 ODP tonnes. This assumes that the Executive Committee would approve the required change in work programme, leading to the eligibility of capacity established after July 1995 as part of the phase-out plan.

18. For 2007, a number of technical assistance activities are proposed, consisting of training of personnel in implementation of phase out activities, new formulation of standards for foam products and revision of old ones (phase V), 2006 performance audit, and consultant services.

SECRETARIAT’S COMMENTS AND RECOMMENDATION

COMMENTS

19. The Secretariat pointed out to the World Bank that the request of China regarding the funding of enterprises established before 7 December 2001 is inconsistent with eligibility criteria established for stand-alone projects, which require enterprises to be established before July 1995; however, the Executive Committee in its decision 51/12 has provided guidance on how to proceed.

20. The Secretariat would like to draw attention to the information provided to the last meeting of the Executive Committee in paragraph 10 of document 51/26, stating that “in conjunction with the submission of the 2007 AIP to the 50th Meeting, the World Bank had approached the Secretariat concerning the possibilities for support under the foam sector plan for enterprises established after July 1995. The Agreement, as approved by the 35th Meeting of the Executive Committee, specifies that the Chinese polyurethane foam sector plan and other related documentation may include estimates of specific funds that were thought to be needed for specific items. Notwithstanding this, the Executive Committee expressed in the Agreement that it wishes to provide China with flexibility in using the agreed funds to meet the consumption limits agreed, and that it has the understanding that during implementation, as long as it is consistent with this Agreement, the funds provided to China pursuant to this Agreement may be used in the

manner that China believes will achieve the smoothest possible CFC polyurethane foam sector phase-out, consistent with operational procedures as agreed between China and the World Bank in the polyurethane foam sector plan as revised and as indicated in the AIPs.”

21. Further in paragraph 11 of document UNEP/OzL.Pro/ExCom/51/26, the “Secretariat informed the World Bank in October 2006 of its understanding of the Agreement that China is entitled to use the flexibility mentioned in a way that enterprises could benefit from the plan, which would be deemed non-eligible if submitted as part of an investment project. This is particularly valid for enterprises with capacity established after July 1995. The related activity still has to fulfil a number of conditions, one being that it leads to CFC phase-out in the foam sector, that it is in line with operational guidelines agreed between the World Bank and China, and that it is indicated in an AIP, which in turn needs to be approved by Executive Committee prior to implementation.”

22. The World Bank submitted the request for approval of the 2007 AIP in conjunction with a request for approval the use of funds for enterprises established up to December 2001 in the AIPs for 2005, 2006 and 2007. The production of CFCs in China ceases at the end of June 2007, therefore support to the remaining enterprises appears to be time critical. As a consequence, the World Bank and China decided to submit the request for approval of the 2007 AIP in advance of the request for release of the related tranche.

RECOMMENDATION

23. In line with the comments provided above, the Secretariat recommends the 2007 AIP for approval at this time, without the related funding tranche, and in view of the terms of decision 51/12, recommends authorizing the support of enterprises established after July 1995, on the basis that such an authorization is needed to achieve a complete, sustainable phase-out and that no additional cost are incurred by the Multilateral Fund.

24. The Executive Committee may therefore wish to consider:

- (a) Approving the annual implementation programme for 2007; and
- (b) Authorizing the use of flexibility provided for under the Agreement for CFC phase-out in the polyurethane foam sector in China, approved through decision 35/48, to allow funds to be directed to enterprises established between 25 July 1995 and 7 December 2001 in the annual implementation programmes for 2005, 2006 and 2007.

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS
CHINA**

PROJECT TITLE**BILATERAL/IMPLEMENTING AGENCY**

National phase-out of methyl bromide (phase II, second tranche)	Italy and UNIDO
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NATIONAL CO-ORDINATING AGENCY:

SEPA

LATEST REPORTED CONSUMPTION DATA FOR ODS ADDRESSED IN PROJECT**A: ARTICLE-7 DATA (ODP TONNES, 2005, AS OF MAY 2007)**

Methyl bromide	540.3		
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B: COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES, 2005, AS OF MAY 2007)

ODS	Aerosol	Foam	Ref. Mfg.	Ref. Servicing	Solvents	Process agent	Fumigant
Methyl bromide							620.2

CFC consumption remaining eligible for funding (ODP tonnes)

CURRENT YEAR BUSINESS PLAN: Total funding US \$1.29 million: total phase-out 65.2 ODP tonnes.

PROJECT DATA	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
Montreal Protocol limits	S	1,102.1	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	881.7	0
Annual consumption limit	1,087.8	1,087.8	880.0	723.8	570.6	390.0	250.0	209.0	176.0	150.0	100.0	50.0	0	
Annual phase-out from ongoing projects														
Annual phase-out newly addressed UNIDO	0	0	207.8	156.2	65.2	124.6	0	0	0	0	0	0	0	553.8
Annual phase-out newly addressed Italy	0	0	0	0	88.0	56.0	140.0	41.0	33.0	26.0	50.0	50.0	50.0	534.0
TOTAL ODS CONSUMPTION TO BE PHASED OUT	0	0	207.8	156.2	153.2	180.6	140.0	41.0	33.0	26.0	50.0	50.0	0	1,087.8
Total ODS consumption to be phased-in (HCFCs)														n/a
Project cost as originally submitted (US \$)	4,086,600	0	4,000,000		1,200,000	1,800,000	1,300,000	600,000	500,000	500,000	500,000	302,742		17,873,391
Final Project costs (US \$):														
Funding for UNIDO	4,086,600	0	0	0	1,200,000	1,800,000	1,300,000	600,000	500,000	500,000	500,000	302,742	0	11,194,747
Funding for Italy	0	0	4,000,000	0	0	0	0	0	0	0	0	0	0	3,594,595
Total project funding	4,086,600	0	4,000,000	0	1,200,000	1,800,000	1,300,000	600,000	500,000	500,000	500,000	302,742	0	14,789,342
Final Support costs (US \$)														
Support cost for UNIDO	306,495	0	0	0	90,000	135,000	97,500	45,000	37,500	37,500	37,500	22,706	0	839,606
Support cost for Italy	0	0	470,000	0	0	0	0	0	0	0	0	0	0	405,405
Total support costs	306,495	0	470,000	0	90,000	135,000	97,500	45,000	37,500	37,500	37,500	22,706	0	1,245,012
TOTAL COST TO MULTILATERAL FUND (US \$)	4,393,095*	0	4,470,000	0	1,290,000	1,935,000	1,397,500	645,000	537,500	537,500	537,500	325,448	0	16,034,354
Final project cost effectiveness (US \$/kg)														13.61

* Funding approved at the 41st Meeting of the Executive Committee

FUNDING REQUEST: Approval of funding for the second tranche (2007) as indicated above.

SECRETARIAT'S RECOMMENDATION

Blanket approval of the 2007 tranche

PROJECT DESCRIPTION

25. On behalf of the Government of China, UNIDO has submitted a progress report on the implementation of the first tranche of phase II of the national methyl bromide (MB) phase-out plan for China, and the request for funding of the second tranche of the project at a cost of US \$1,200,000 plus agency support costs of US \$90,000 for UNIDO. The project is being implemented with assistance from the Government of Italy.

Background

26. At its 41st Meeting, the Executive Committee decided, *inter alia*, to approve US \$4,086,600 plus agency support costs of US \$306,495 for UNIDO for the phase-out of 389.2 ODP tonnes of MB in the consumption sector. It also requested UNIDO to assist the Government of China to work toward the completion of a project proposal for the phase-out of all controlled uses of MB for submission to the Executive Committee (decision 41/46).

27. At its 44th Meeting, the Executive Committee considered a national plan for the phase-out of MB in the consumption sector in China (paragraphs 36 to 58 of documents UNEP/OzL.Pro/ExCom/44/33 and Add.1), to be implemented by UNIDO (as the lead implementing agency) and the Government of Italy. Subsequently the Executive Committee, at its 44th Meeting, approved in principle the national plan for the phase-out of MB in the consumption sector in China at a total funding level of US \$14,789,342 (including the amount previously approved for UNIDO at the 41st Meeting to phase out 389 ODP tonnes of MB). It also approved an Agreement between the Government of China and the Executive Committee (decision 44/30).

28. At its 46th Meeting, the Executive Committee considered the progress report on the implementation of the first phase of the national MB phase-out plan (paragraphs 1 to 20 of documents UNEP/OzL.Pro/ExCom/46/29), and approved (under the blanket approval list as contained in Annex IV of document UNEP/OzL.Pro/ExCom/46/47) US \$4,000,000 plus US \$470,000 in agency support costs for the Government of Italy.

Progress report

29. As agreed with the Government of China, the first phase of the project focused on the phase-out of MB used in the tobacco and commodities sectors. The alternative technologies selected were the floating tray system for the tobacco sector and phosphine fumigation for the commodities sector.

30. Several activities have been implemented in the tobacco sector. These include: technical assistance programmes, the formulation of technical specifications for equipment procurement and floating-tray-system training programmes for trainers, field technicians and farmers. Seven technology centres have also been set up and equipped (i.e., installation of 88,000 m² of new greenhouses and upgrade 30,000 m² of existing greenhouses, plastic sheets, clippers and trays). Implementation of this project component will lead to the complete phase-out of MB in the tobacco sector by the end of 2007.

31. In the commodities sector, the conditions for safe and effective phosphine application were achieved through technical assistance programmes including: training, equipment

procurement and installation (including plastic sheets, phosphine generators, recirculation pumps and safety tools), and infrastructure upgrading. A control and monitoring system was also established to evaluate effectiveness, insect resistance and the amounts of MB used in quarantine and pre-shipment applications. The MB consumption in commodities was completely phased out by the end of 2006.

32. In regard to the use of MB for soil fumigation, a training programme on the biological control of soil-borne pests in tomato, cucumber and strawberry sectors was implemented, and SEPA and the China National Agro-tech Extension and Service Centre organized a seminar on bio-alternative technologies for strawberry crops in 2006. In January 2007, UNIDO issued the first contract for implementation of activities to phase out MB as a soil fumigant. This would address the phase-out of 74.6 ODP tonnes of MB used in strawberry and cucumber crops by the end of 2007. The specification for the equipment required to phase out MB in soil applications and the terms of reference for training programmes have been finalized. The tenders for equipment procurement have been launched.

33. In July 2004, SEPA issued the implementation procedure for the management of the MB production quota system. The amounts of MB (including QPS applications) produced by each plant are being controlled. The import and export licensing system has been effective since 1 January 2004. A regulation for banning the use of MB commodity applications was issued by SEPA/SAG in September 2006 and enforced from 1 January 2007.

34. Of the total funding level so far approved for the Government of Italy and UNIDO (US \$8,086,000), UNIDO (as the agency implementing the project) has disbursed US \$4,470,108 (excluding agency support costs), and has obligated US \$1,390,803.

2007 work programme

35. In the tobacco sector, a complete phase-out of MB consumption is proposed by the end of 2007, one year in advance of the phase-out date indicated in the project proposal. To achieve this goal, additional greenhouses for tobacco seedling production will be installed and farmers will be trained in the use of the alternative technology. A long-term technical assistance and training programme for farmers will be designed and implemented to make the MB phase-out sustainable.

36. For MB used as a soil fumigant, equipment and farm materials will be provided to farmers to phase out its consumption mainly in strawberry, cucumber and tomato crops. Training programmes will be conducted for farmers in the proper use of the alternative technologies. At the end of the project, about 15,000 farmers will have been trained.

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

37. The 2005 MB consumption reported by the Government of China under Article 7 of the Protocol of 540.3 ODP tonnes was already 341.3 ODP tonnes below the Protocol's maximum allowable level of consumption for that year of 881.6 ODP tonnes, and 339.7 ODP tonnes below the allowable level of consumption under the agreement between the Government of China and

the Executive Committee of 880.0 ODP tonnes. MB consumption levels in 2006 have been estimated at 570.6 ODP tonnes, which is 153.2 ODP tonnes below the allowable level of consumption under the agreement.

38. Through implementation of the project, the Government of China, with the assistance provided by the Government of Italy and UNIDO has been able to:

- (a) Completely phase out the use of MB in the commodity sector two years in advance of the proposed phase-out date indicated in the proposal;
- (b) Achieve the complete phase-out of MB used for the production of tobacco seedlings by the end of 2007; and
- (c) Achieve the phase-out of 28.4 ODP tonnes of MB used as a soil fumigation (excluding the tobacco sector) in 2006 and the phase-out of an additional 74.6 ODP tonnes of MB by the end of 2007.

RECOMMENDATION

39. The Fund Secretariat recommends blanket approval of the project with associated support costs at the funding level shown in the table below.

	Project Title	Project Funding (US \$)	Support Costs (US \$)	Implementing Agency
(a)	National phase-out of methyl bromide (phase II, second tranche)	1,200,000	90,000	UNIDO

VERIFICATION OF THE CONSUMPTION OF CTC AS A PROCESS AGENT IN 2006 UNDER PHASE II

Introduction

40. The World Bank is submitting to the 52nd Meeting, on behalf of the Government of China, the request for the release of the 2007 funding tranche of US \$10 million and US \$750,000 as support cost for the implementation of the 2007 work programme under Phase II of the China CTC sector plan. The Executive Committee approved the 2007 work programme at its 50th Meeting but withheld the funds till the World Bank submitted the verification of the CTC consumption in 2006 for Phase II of the sector plan, which the World Bank is submitting to this meeting. Section I of this document summarises the verification report and the report itself could be made available upon request.

41. The World Bank submitted to the 51st Meeting the verification of the CTC production in China for the year 2006 and the CTC consumption in the process agent applications under Phase I of the sector plan. However the findings from the verification left a significant amount of CTC produced not accounted for. Consequently the Executive Committee requested the World Bank to “to provide reasons for over 1,496.1 ODP tonnes of CTC production not accounted for in the results of the verification of CTC production and consumption for process agent uses in 2006 in Phase I as part of the verification of CTC consumption in Phase II of the sector plan due for the 52nd Meeting.” The World Bank has submitted additional data from the results of the verification to explain the distribution of the CTC produced in 2006. Section II of the document provides a short summary of the additional data received from the World Bank.

42. Another issue which was left unresolved from the 50th Meeting related to the ceiling of 14,300 ODP tonnes in the Agreement of Phase II for CTC used in process agent applications included in the interim list in Table A-bis of decision XVII/8 of the Meeting of the Parties, and any other applications not covered in Phases I and II of the sector plan. Regarding the ceiling, the footnote in the Agreement says, “These figures are subject to reconfirmation at the 50th Executive Committee Meeting. The CTC use figures for the years 2007, 2008 and 2009 will be reviewed by the Executive Committee and may be amended.”

43. The CTC survey which SEPA was conducting in China at the time when the Agreement was approved had identified 21 new CTC uses that had not been covered by any decision of the Meeting of the Parties. However, CTC consumption in 2006 as reported by SEPA for those uses both in the list in Table A-bis and newly identified potential process agent applications was 5,216.7 mt (5,738.7 ODP tonnes), well below the ceiling of 14,300 ODP tonnes. The Executive Committee decided at its 51st Meeting to consider the need to reconfirm the ceiling of 14,300 ODP tonnes set in the agreement for those applications at the 52nd Meeting of the Executive Committee.”

Section I: Verification of CTC consumption under phase II of the CTC sector plan in 2006

44. The verification was carried out in May 2007 by two teams. Each team consisted of one international and one local consultant. Team One covered ten enterprises and Team Two covered six enterprises.

45. Both teams followed a similar methodology in conducting the verification which is described below:

- (a) Obtained information on plant history, plant identification, and plant activities on the production of products using CTC as process agents and CTC consumption in 2006 from the plant management's;
- (b) Verified CTC purchases by reviewing CTC purchase orders and CTC daily movement records from outside to the plant warehouse;
- (c) Verified CTC opening and closing stocks by checking CTC inventory records, including the amount of CTC stored in the plant warehouse and that remained in the production system;
- (d) Verified $\text{CTC consumption} = \text{CTC purchase} + \text{CTC opening stock} - \text{CTC closing stock}$;
- (e) Verified production and sales by reviewing product packaging/ transferring and daily movement records;
- (f) Verified the opening and closing stocks of products by reviewing the product inventories;
- (g) Verified number of operating days by reviewing the plant daily production logbooks;
- (h) Made a cross check of financial records by reviewing all VAT invoices related to the CTC purchase in 2006; and
- (i) Inspected the production site, or the dismantled site in those cases of plant closures, and took photographs.

46. The report on each of the companies visited includes a description of the history, its main product lines, and the product line which is the focus of the verification. The results of the verification were presented by showing the opening stock, purchase, consumption, other uses and closing stock of CTC in the plant for 2006, including products. The verification covers the number of days that are dedicated to the products concerned and the ratio of CTC consumption per unit of product manufactured. It concludes by discussing the issues and problems that came out of the visit, and the actual CTC purchased by the plant in 2006 and the CTC quota received from SEPA.

47. The results from Team One conclude that the ten enterprises purchased a total of 2,164.5 ODP tonnes of CTC against a total quota of 2,244 ODP tonnes issued by SEPA. The ten enterprises represent 25 per cent of the total number of 40 enterprises covered under Phase II and consume 37 per cent of the total CTC consumption purchase quota of 4,720 ODP tonnes issued under Phase II in 2006. Attached is a summary of the results of the verification of the ten enterprises from Team One, with data on the name of the enterprise, products that use CTC, production, CTC quota in 2006, CTC purchase, CTC used, status of production line, and date of the verification.

48. The results from Team Two conclude that the six enterprises consume 8.91 ODP tonnes of CTC in 2006 against 0 quota issued by SEPA. One of the enterprises had a quota to purchase CTC in 2005 but did not use it and consequently could not get a quota for 2006. However some CTC was obtained illegally for the production of Mirex in 2006. As a percentage, the six enterprises represent 15 per cent of the total number of enterprises under Phase II and consume about 0.17 percent of the total CTC consumption purchase quota of Phase II. Also attached is a summary of the results of the verification of the six enterprises from Team Two, with data on the name of the enterprise, product that uses CTC, production, CTC used, and status of the production line.

49. The submission from the World Bank contains three annexes: Annex I contains the 2006 PA II verification records and closure activities; Annex II contains the photographs from verification visits; and Annex III presents documentation from plant closures.

COMMENTS FROM THE SECRETARIAT

50. The methodology provided for in the Agreement of Phase II of the CTC sector plan for conducting the verification of the CTC consumption of Phase II requires that “the Bank will verify consumption by companies and applications covered by the PA II Sector Plan. The annual verification will cover a random selection of at least 30 per cent of all enterprises covering at least 30 per cent of the PA II consumption.” The total number of enterprises covered by the two verification teams is 16, which is 40 per cent of the total number of 40 enterprises in Phase II of the sector plan. The CTC consumption purchase quota of 2,040 mt represented by these 16 enterprises is some 37 per cent of the total CTC consumption purchase quota of 4,720 ODP tonnes under Phase II of the sector plan. The verification did not include those enterprises which were visited by the World Bank monitoring mission within the past 12 months. The sampling of the verification satisfies the requirement in the Agreement and could confirm the validity of the total consumption as reported by SEPA.

51. The 5,289 mt or 5,718 ODP tonnes as verified as the total CTC consumption under Phase II in 2006 is below the maximum allowable CTC consumption of 6,945 ODP tonnes as set in the Agreement for 2006.

52. However the fact that one of the Mirax producers could purchase illegally CTC shows two sides of the situation on the control of CTC. On one side the control that has been implemented by SEPA is effective because the plant could not buy the controlled substance from any of the CTC producers without a quota, but on the other there appears to be a black market existing in China which could provide for such unauthorized use and warrants attention from SEPA.

53. Several enterprises were reported by the verification team as having ceased production and being ready for dismantling their plant. However the dismantling would not begin until these enterprises received the compensation due. Some could even return to production the provision if compensation does not move ahead. The World Bank clarified that some of these plants require an environmental assessment under the Stockholm Convention on Persistent Organic Pollutants before dismantling could go ahead.

Section II: Additional data on the verification of CTC production in 2006 in China

54. The additional data from the World Bank attempts to account for the CTC produced in the year 2006. It starts from the total gross CTC production and deducts from that the CTC used as feedstock in CFC production and other non-ODS chemicals and the CTC destroyed. The balance is further reduced by the verified consumption in Phase I and Phase II of the sector plan, the consumption in process applications included in table A-bis of decision XVII/8 of the Meeting of the Parties, new applications which have not been regulated by any decision of the Parties, and finally the laboratory use. After these deductions, there is still a balance of 2,706.08 mt which is claimed to be inventoried by the CTC producers.

55. The submission of the World Bank then provides a break-down by CTC producer the opening CTC stock and the closing CTC stock in 2006. In total, there is an increase of 2,706.08 mt of CTC stock held by the producers, which matches the remaining balance between the gross production and all the uses. The additional data from the World Bank is contained in a short document and is attached.

COMMENTS FROM THE SECRETARIAT

56. The Secretariat has verified all the numbers used in the submission against those from the CTC production verification that the World Bank submitted to the 51st Meeting and found them consistent, except in two cases. The first was the 486 mt that was reported as laboratory use, and which was not included in the verification. The second was a discrepancy of 6.58 mt in CTC consumption Phase II in 2006, the figure in the verification report is 5,289.05 mt and the number in the additional data is 5,295.63 mt.

RECOMMENDATIONS

57. The Secretariat recommends that the Executive Committee:
- (a) Takes note of the verification of the CTC consumption of Phase II of the CTC sector plan, and the additional data on the CTC production verification provided by the World Bank;
 - (b) Requests the World Bank and the Government of China to accelerate the contractual work and disburse to the plants which are ready for closure the necessary compensation to complete the dismantling work in a timely manner;
 - (c) Requests the Government to further tighten the control of CTC production and sales to reduce the chance of unauthorized access to the controlled substance;
 - (d) Approves the disbursement of US \$10 million and US \$750,000 as support costs for the implementation of the 2007 work programme of Phase II of the CTC sector plan; and
 - (e) Considers the need to adjust the ceiling of 14,300 ODP tonnes of the Phase II Agreement for CTC applications that are not covered by Phases I and II of the

sector plan, in light of the provisions in the Agreement and the findings of the survey conducted by SEPA, as cited in paragraphs 3 and 4 above of document UNEP/OzL.Pro/ExCom/52/30.

SUMMARY OF VERIFICATION RESULTS FOR THE TEN SELECTED PA II ENTERPRISES IN 2006

PA II Sector Plan #	Name of enterprise*	Product that use CTC PA	Production (MT)	CTC quota (ODS tonnes)	CTC purchase (ODS tonnes)	CTC used (ODS tonnes)	Production line status	Date of visiting
22	Jincheng Chemical	CPP and CEVA	CPP: 813.22 CEVA: 152.88	500	423.30	353.31	In production	16-Apr-2007
47	Changshu Xiangyang	CPP and CEVA	CPP: 219.44 CEVA: 132.69	260	259.52	229.05	In production	20-Apr-2007
53	Dongtai No. 3 Chemical	Chlordane	0	0	0	0	Dismantled and utilized for non-ODS production in 2002.	25-Apr-2007
61	Jiangsu Anpon	Bupropfenzin	1,408.39	300	328.08	266.65	Line 1 dismantled in 2005; Line 2 converted to non-ODS process in 2007	27-Apr-2007
77	Jiangsu Suhua	3-Phenoxy Benzaldehyde (MPB)	1,234.31	470	461.11	345.32	In production	18-Apr-2007
80	Jiangsu Yangnong**	Imidacloprid and Mospilam	Imidacloprid: 578.51 Mospilam: 89.96	180	168.6	168.87	In production	23-Apr-2007
86	Jintan Huasheng	3-Phenoxy Benzaldehyde (MPB)	993.38	190	189.75	228.7	In production	21-Apr-2007
193	Longyou Greenland	Bupropfenzin	0	0	0	0	Dismantled in 2005 and utilized for other non-ODS production.	29-Apr-2007
203	Xingang Graphite	CPP	67.50	90	87.9	87.82	Stopped in 2006 and dismantled in 2007	26-Apr-2007
207	Rudong Shidian	CPP	15.32	50	49.44	31.6	Stopped in 2006 and dismantled in 2007	24-Apr-2007
Total verified CTC purchase and consumption in 2006			(ODS tonnes)	2040.00	1967.70	1711.32		
			(ODP tonnes)	2244.00	2164.47	1882.45		

*Complete name of the enterprise is indicated in following "Individual Verification Report" for the corresponding enterprise.

** The company uses CTC as a process agent in manufacture of 2-chloro-5-chloromethylpyridine (PA#24, Decision XVII/7).

2-chloro-5-chloromethylpyridine is an intermediate used within plant for both Imidacloprid (PA#25, Decision XVII/7) and Mospilam (not listed by Decision XVII/7) production.

STATUS OF SIX CHLORDANE/MIREX PRODUCERS IN 2006

PA II Sector Plan #	Name of enterprise*	Chlordane			Mirex		
		Production MT	CTC used ODP tonnes	Production line Status	Producti on MT	CTC used ODP tonnes	Production line Status
204	Taicang Xintang	0		Stopped	10	8.91	In operation
204	Taicang Hushi	0		Stopped	No	No	No
106	Shanghai Fengjiang	0		Stopped	0	0	Stopped
108	Suzhou Jiangfeng	0		Dismantled and partly utilized for other non-ODS use	No	No	No
53	Changzhou Yekang	0		Dismantled and partly utilized for other non-ODS use	2	0**	In operation
87	Jintan Shuibe	0		Dismantled	No-	No	No
	Sum	0	0		12	8.91	

Data from the Bank's 2006 CTC verification report

CTC producers	Opening stock, MT	closing stock, MT
CTC 1	7.27	71.68
CTC 2	358.52	2620.62
CTC 3		
CTC 4	0	0
CTC 5		
CTC 6		
CTC 7		
CTC 8		
CTC 9	0	0
CTC 10		
CTC 11	8.5	9
CTC 12	42.48	369.26
CTC 13	5.25	75
CTC 14	6.8	32.84
CTC 15	0	0.49
CTC 16	257.39	213.4
	686.21	3392.29

Additional CTC sto ckpiled in 2006, MT

2706.08

Summary of 2006 CTC production and consumption status	
Verified total CTC production in MT	41679.95
CTC uses for feedstock uses and disposal in MT	27482.05
for CFC production	16900.83
for non-ODS chemicals	10475.62 (including conversion to C M1)
for disposal by incineration	105.60
Verified/Reported PA and lab uses in MT	11417.82
PA I	419.48
PA II	5295.63 (Verification report submitted to 52nd meeting)
A-bis	4442.03
New PA	774.68 (Reported by SEPA based on survey and procurement licensing)
lab use	486.00 (SEPA-reported in summary report)
CTC stockpile by CTC producers in MT	2706.08 (See next whorsheet for detail)
Unidentified CTC uses in MT	74