REPORT ON IMPLEMENTATION OF APPROVED PROJECTS
WITH SPECIFIC REPORTING REQUIREMENTS
Introduction

1. The Government of Germany, UNDP and UNIDO have submitted progress reports on the implementation of the following projects, where specific reporting requirements are contained in the agreements, for consideration by the Executive Committee at its 50th Meeting:

   (a) **Colombia**: National phase-out plan for Annex A (Group I and II) substances (2005-2006 progress report) (UNDP);

   (b) **Jordan**: Complete phase-out of the use of MB (180.0 ODP tonnes), approved by the Executive Committee at its 29th Meeting at a total cost of US $3,063,000;

   (c) **Mexico**: Sector plan for phasing out CFC-11 and CFC-12 production sector (verification of sustained cessation of CFC production) (UNIDO).

2. The Secretariat reviewed the progress reports in light of the original project proposals, ODS data reported by the Governments concerned under Article 7 of the Montreal Protocol, and relevant decisions taken by the Executive Committee and the Meeting of the Parties.

**Colombia: National phase-out plan for Annex A (Group I and II) substances (UNDP)**

3. The national CFC phase-out plan (NPP) was approved by the Executive Committee at its 41st Meeting (UNEP/OzL.Pro/ExCom/41/29 and Corr.1 and Add.1). Under the NPP, the Government of Colombia committed to phasing out all CFCs and halons by 1 January 2010. The Executive Committee approved in principle US $4.5 million for implementation of the NPP, according to the schedule contained in the agreement between the Government of Colombia and the Executive Committee. The Committee also approved the first funding tranche at the amount of US $2,146,820 (excluding agency support costs) for implementation of the first phase covering the 2004–2005 period.

4. At its 44th Meeting, the Executive Committee considered a progress report on the implementation of the NPP from January to August 2004 without a request for the second (and final) tranche of the project, since it was due at the end of 2005 (UNEP/OzL.Pro/ExCom/44/15). At its 47th Meeting, the Executive Committee considered the request for the second and last funding tranche (US $2,353,180 excluding agency support costs for UNDP) for the implementation of the NPP for Colombia (UNEP/OzL.Pro/ExCom/47/26).

**ODS consumption**

5. According to the agreement under the NPP, total CFC consumption should be below 1,020.4 ODP tonnes in 2005. In 2005, the Government of Colombia reported CFC consumption of 556.89 ODP tonnes under Article 7 of the Montreal Protocol. For 2006, the Government of Colombia has authorized the import of 685 ODP tonnes of CFCs, which is below the maximum allowable consumption in the NPP (i.e., 750 ODP tonnes). The phase-out of CFCs associated with the polyurethane foam sector has been completed with a major reduction in the imported amounts of CFC-11.
6. The 2004 halon consumption reported by the Government of Colombia to the Ozone Secretariat is zero. As of September 2005, no imports of halon had been reported for 2004 or 2005. According to the Colombia NPP, the complete phase-out of halon consumption was proposed by 2009.

7. A number of results have been achieved so far during 2005-2006 implementation of the Colombia NPP, including: the establishment of standards for the control of ODS; the implementation of an evaluation-certification process and a database of registered technicians; the initiation of the conversion of the commercial refrigeration manufacturing sub-sector; the distribution of recovery and recycling equipment; the restriction on the use of halon exclusively to the maintenance of existing equipment and systems; and the dissemination of information of the protection of the ozone layer at the national level.

Breakdown of the approved project budget

8. The breakdown of the approved project budget (in US $) is presented in the table below:

<table>
<thead>
<tr>
<th>Project component</th>
<th>Approved</th>
<th>Expenditure*</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase-out of CFCs in the commercial refrigeration</td>
<td>450,000</td>
<td>290,465</td>
<td>159,535</td>
</tr>
<tr>
<td>manufacturing sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technician-licensing programme for the refrigeration</td>
<td>1,338,820</td>
<td>916,426</td>
<td>422,394</td>
</tr>
<tr>
<td>and air conditioning service sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical assistance for legal framework</td>
<td>20,000</td>
<td>10,498</td>
<td>9,502</td>
</tr>
<tr>
<td>Technical assistance for information and awareness</td>
<td>80,000</td>
<td>80,000</td>
<td>-</td>
</tr>
<tr>
<td>Halon bank management programme</td>
<td>58,000</td>
<td>4,194</td>
<td>53,806</td>
</tr>
<tr>
<td>Technical assistance for implementation and monitoring</td>
<td>200,000</td>
<td>210,673</td>
<td>(10,673)</td>
</tr>
<tr>
<td>Totals</td>
<td>2,146,820</td>
<td>1,512,367</td>
<td>634,453</td>
</tr>
</tbody>
</table>

* Expected expenditure as of December 2006

Independent verification

9. In 2006, an audit of the 2005 consumption verification report was undertaken by an independent auditor who concluded that “2005 data on imports of ODSs reported by Ozone Technical Unit (OTU) are totally reliable; and that Colombia is accomplishing its targets on internal consumption as agreed”. The auditor also recommended that “the control system for imports and exports and the institutional strengthening is widely consolidated. The main recommendation is to persevere in this path.”

Second work programme

10. From 2007 until the completion date, the work programme of the Colombia NPP will be based on the following main strategies:

(a) Completing the conversion of the commercial refrigeration manufacturing sub-sector; certifying approximately 800 refrigeration technicians in good service practices; finalizing the second and third phases of providing basic servicing tools and recovery/recycling equipment to service workshops; re-structuring the recovery and recycling programme;

(b) Strengthening the technical assistance project for implementation and monitoring;
(c) Continuously providing support for halon end-users in the proper management of halon stocks; and

(d) Promoting institutional coordination within the relevant ministries and other government departments in Colombia.

Secretariat’s comments

11. The Secretariat noted the comprehensive and well written progress report on the implementation of the Colombia NPP, together with the supporting documents, including the favourable verification report on the national ODS consumption in Colombia. The Secretariat also noted the results achieved so far by the Government of Colombia, with the assistance provided by UNDP, in phasing out its CFC and halon consumption, i.e., a 2005 CFC consumption of 556.89 ODP tonnes, which is 1,651.31 ODP tonnes below the CFC baseline (i.e., 2,208.2 ODP tonnes), and zero consumption of halon while the allowable consumption was 4.4 ODP tonnes.

12. The Secretariat noted that from the CFC level of consumption reported for 2005, a further reduction of 225.6 ODP tonnes would be needed to achieve the 2007 allowable level (i.e., 331.23 ODP tonnes) and sought an explanation from UNDP on whether or not the Government of Colombia would be able to meet the 2007 target on time. UNDP pointed out that the Government of Colombia is confident that it will achieve the 2007 consumption level without major difficulties.

13. UNDP reported that implementation of the activities to phase out CFC in the commercial refrigeration manufacturing has been delayed. Considering that the average lifetime of this equipment is at least 15 years, the Secretariat asked UNDP what provisions would be put in place to service these systems after 2010. UNDP pointed out that the remaining CFC consumption in the commercial refrigeration manufacturing sector is low. The small amounts of CFC-12 required for servicing this equipment will be initially covered through the recovery/recycling activities and in the future by drop-in replacements.

14. The Secretariat also noted that no consideration has been given to the establishment of procedures to favour the importation of non-CFC drop-in refrigerants as an option to achieve the 2007 control limit and the complete phase-out of CFCs by 1 January 2010. UNDP reported that, since non-ODS refrigerants are not covered by the legal framework to control ODS imports, importers are allowed to import them without any restrictions. Currently, non-CFC based refrigerants are available on the market. The Government has been following closely the impact, sustainability and effectiveness of the use of drop-in refrigerants, and concludes that the market is now being transformed without additional incentives.

Secretariat’s recommendation

15. The Executive Committee may wish to take note of the progress report on the implementation of the national CFC phase-out plan (NPP) for Colombia, covering the period 2005-2006.
Jordan: Complete phase-out of the use of MB (Government of Germany)

Background

16. On behalf of the Government of Jordan, the Government of Germany submitted to the 29th Meeting of the Executive Committee an investment project for the total phase-out of MB use in soil fumigation (UNEP/OzL.Pro/ExCo m/29/19). The Executive Committee decided to approve the project at a total level of funding of US $3,063,000 (excluding agency support costs), according to conditions stipulated in an Agreement between the Government of Jordan and the Executive Committee (decision 29/34), to achieve complete phase-out of MB by 1 January 2015.

17. At its 48th Meeting, the Executive Committee considered a progress report on the implementation of the MB phase-out project for Jordan (paragraphs 85 to 91 of document UNEP/OzL.Pro/ExCom/48/18).

Progress report

18. Since the approval of the phase-out project, viable MB-alternative technologies have been introduced as replacements for MB as a soil fumigant through 390 field demonstrations and 200 extension activities, and with the participation of 5,000 farmers. In addition, six nurseries have been established to produce grafted seedlings. So far, the number of MB users was reduced from at least 557 in the Jordan Valley alone, at the start of the project, to 95 users in all the country. Incidents to revert back to the use of MB are virtually absent.

Further activities to be undertaken

19. Further activities to phase out MB and ensure the long-term sustainability of this phase-out include additional demonstration activities, extension activities, further capacity-building and awareness activities, as well as improved legislation, confirmation of the new reduction targets, and ongoing enforcement of the official decree by the Ministry of Agriculture. These activities will be implemented in order to reach the targets of no more than 39 and 27 ODP tonnes of MB imports in 2007 and 2008 respectively.

Secretariat’s comments

20. The MB baseline consumption for Jordan has been calculated at 180 ODP tonnes. Data reported by the Government of Jordan under Article 7 of the Montreal Protocol and the maximum allowable levels of MB consumption in the country are presented in the table below:

<table>
<thead>
<tr>
<th>MB consumption (ODP tonnes)</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article 7 data</td>
<td>105.3</td>
<td>105.6</td>
<td>90.6</td>
<td>80.1</td>
<td>80.1</td>
<td>60.0</td>
<td></td>
</tr>
<tr>
<td>Agreement (allowable level)</td>
<td>180.0</td>
<td></td>
<td></td>
<td></td>
<td>108.0</td>
<td>54.0</td>
<td></td>
</tr>
<tr>
<td>Licensed importation</td>
<td>104.7</td>
<td>105.7</td>
<td>91.4</td>
<td>79.9</td>
<td>78.6</td>
<td>60.0</td>
<td>51.0</td>
</tr>
</tbody>
</table>

21. The Secretariat noted that the annual MB phase-out targets committed to by the Government of Jordan have been surpassed. Upon a request by the Secretariat, the Government of Germany indicated that the estimated consumption for 2006 will be below the 54 ODP tonnes agreed by the Government of Jordan with the Executive Committee.
Release of funding tranches

22. The Government of Germany is requesting the release of the third tranche of the project (US $0.9 million) taking into consideration that the import quota for MB has been established at 51 ODP tonnes. The Secretariat noted, however, that as per the agreement with the Executive Committee (Annex V of document UNEP/OzL.Pro/ExCom/29/65), a funding tranche could be released only when it has been demonstrated that the relevant MB phase-out targets have been met (i.e., 54 ODP tonnes for 2006). In spite of the licensing system being in operation, the actual amount of MB imported into the country will only be known at the end of December 2006. Furthermore, of the total funding of US $2 million so far released, a balance of US $300,000 is still available.

Secretariat’s recommendation

23. The Executive Committee may wish:

   (a) To take note of the progress report on the implementation of the complete phase-out of the use of MB in Jordan;

   (b) To request to the Government of Germany to withhold the release of US $900,000 for the third tranche of the project pending agreement from the Secretariat to the conclusions of a report to be submitted by the Government of Germany confirming that the 2006 target of 54 ODP tonnes had been met;

   (c) In the event that the 2006 MB phase-out target has not been met, to further request that the Government of Germany submit an explanatory report to the 51st Meeting of the Executive Committee.

Mexico: Sector plan for phasing out CFC-11 and CFC-12 production sector (verification of sustained cessation of CFC production) (UNIDO)

24. The Government of Mexico, through UNIDO, has submitted the report on the technical and financial audit of the cessation of CFC production at Quimobásicos Plant in Mexico.

Background

25. The Executive Committee at its 40th Meeting in 2003, approved in principle a total of US $31.85 million for the implementation of the Agreement for the Mexican CFC production sector, under which the Government of Mexico was committed to a dual condition of a maximum level of total CFC production of 22,000 metric tonnes for the period 2003-2005, and at the same time not exceeding the maximum allowable production limit specified in the Agreement for each of the three years. With the successful implementation of the 2003 to 2005 annual work programmes the Government of Mexico, with the assistance of UNIDO, terminated CFC production in August 2005 at the Quimobásicos plant and met all the conditions of the Agreement ahead of the planned completion date. UNIDO submitted the verification report of the 2005 CFC production to the 47th Meeting of the Executive Committee in 2005 and received the final tranche of US $11.85 million plus the associated support cost.
26. The Executive Committee requested the Government of Mexico and UNIDO to continue monitoring the CFC production closure at Quimobásicos between 2006-2009 to ensure sustainability of the closure. The future audits should focus in particular on:

(a) No entry of CTC into the plant after the closure date of CFC production;
(b) Verification of stock, purchase and use of HF for HCFC-22;
(c) Production verification of both Quimobásicos plants;
(d) Stock verification of the inventory of CFC-11 and CFC-12 and reductions of the inventory over the years;
(e) Verification of consumption norms of chloroform and HF for HCFC-22 production;
(f) Changes carried out in the plant, equipment additions and modifications; and
(g) Any other checks needed for full compliance.

27. Accordingly, UNIDO carried out a technical and financial audit of the Quimobásicos plant to ensure that there was no CFC production between September 2005 and May 2006 and that the plant had been permanently retrofitted for good for the production of HCFC-22. The main findings of the audit are set out in Annex I to this document.

Secretariat’s comments

28. The audit on the cessation of CFC production was carried out in accordance with decision 47/29 of the Executive Committee and was implemented in compliance with the guidelines for verifying ODS production phase-out approved by the Executive Committee. The results confirmed that there had been no CFC production by the Quimobásicos Plants after the closure of the CFC production in August 2005, and that the Plants had gone through the necessary changes and were now only producing HCFC-22. The auditors however recommended that a yearly audit until 2010 was needed since it would be possible for CFC production to resume without major changes to the plants.

29. The results also reconfirmed the actions that had been taken by the Government of Mexico to ensure the permanence of the CFC production closure, including revoking the import license of the company to purchase CTC, one of the key feedstocks for the production of CFC.

30. The audit report contains a number of annexes presenting the evidence of the various aspects of the CFC production closure and the corresponding systems set up for switching to HCFC production. It also contains the detailed breakdown of the data, including monthly breakdown of the CFC and HCFC production and consumption of feedstock. The Secretariat is not distributing the audit report or its annexes, except the letter of the Government revoking the license of Quimobásicos to import CFC. However the report and the other annexes could be made available to members of the Executive Committee upon request.
31. The Secretariat recommends that the Executive Committee:

(a) Commends the Government of Mexico and UNIDO for the good effort in complying with decision 47/29 and implementing the audit requirement to confirm the sustained cessation of CFC production at Quimobásicos in Mexico; and

(b) Requests the Government of Mexico and UNIDO to continue monitoring the CFC production closure at Quimobásicos between 2007-2009 as required under decision 47/29.
Annex I

SUMMARY OF THE FINDINGS OF THE VERIFICATION OF SUSTAINED CESSATION OF CFC PRODUCTION IN MEXICO

1. The verification was carried out in May 2006 by Ess Jay Consultants, the same consulting firm which had performed the verifications between 2003 to 2005. While the team, which consisted of a technical consultant and an accountant, conducted the audit following the same procedures as they did when carrying out the verifications in the previous years, they also looked for signs and indicators that could convince them of the permanent cessation of CFC production.

2. Firstly, as usual, they examined the following operational and statutory records for the year 2005 up to December 2005:

   (a) Raw material purchase and issue records;
   (b) Daily production logs and production records;
   (c) Process parameters records;
   (d) Quality control records;
   (e) Stock transfer and record for storage of stocks at strategic location (storage on contractual basis outside the Plant), consignment storages - storages at all points of sales (Monterrey and Mexico City);
   (f) Stock register in value as per books of accounts for the year 2005 to check the opening and closing stock and also Audited Balance Sheet for the year 2005 for cross checking;
   (g) Sales invoices;
   (h) Monthly VAT data filed with revenue authority for claim of IVA, which gives the monthly purchase of raw materials and sales of finished goods; and
   (i) Plant modification technical and financial records.

3. However they inspected carefully the conversion of Plant 2 of the two plants of Quimobásicos, because Plant 2 had been dedicated to the production of CFCs until August 2005 when production was terminated. The management of Quimobásicos reported having converted the plant to HCFC-22 production. The team examined the changes that had been carried out in Plant 2 to convert the plant from CFC-11/CFC-12 mode to HCFC-22 mode. They found the following:

   (a) Carbon tetrachloride main storage tank had been converted to store chloroform. The tanks for Plant 1 and Plant 2 had been interconnected;
(b) New catalyst was charged for production of HCFC-22. The team verified the procurement of new catalyst and disposal of removed catalyst of CFC-11/CFC-12 to landfill;

(c) The distribution control system had been tuned for HCFC-22 operations. Control valves, plant-trip logics, interlock settings had been adjusted for HCFC-22 plant;

(d) Compressors for CFC-11/CFC-12 were removed from the location and a new compressor for HCFC-22 had been hooked up with the plant. One of the three compressors was discarded as being very old and two were retained as spares for the filling station;

(e) In the new process, columns T6 and T7 were used to separate HCFC-21, HCFC-22 and HFC-23;

(f) CFC-11 Day Tank had been disconnected from the system and would be removed from the location within fifteen days;

(g) The auditors verified that after the above conversion, Plant 2 commenced HCFC-22 production from 18 September 2005. In the period September to December 2005 the modified Plant 2 produced 1,763 MT of HCFC-22; and

(h) The auditors also verified the expenses incurred by the management to carry out such changes and in their view the expenses were commensurate with the physical changes.

4. Stock of HF, a common feedstock for both CFC and HCFC production was audited. Consumption of HF was based on inventory differences in the level of tank. The difference in the pump flow reading and the inventory level was proportionally accounted for in both the plants.

5. The CTC stock verification showed that there had been no change in CTC stock from the last audit as 48.4 MT. The Quimobásicos management confirmed their plan for the disposal of their current stock of CTC was waiting for necessary clearances. No permission for import of CTC was granted to the plant by the Government of Mexico (SEMARNAT, Mexico) after 6 September 2005. A copy of the letter from the Government of Mexico to the plant is enclosed as an attachment.

6. The field verification of the period September 2005 onwards for CFCs and HCFC-22 at Quimobásicos factory confirmed the production, inventory and sales data submitted by the Plant in response to the questionnaires prepared by the auditors.

7. The auditors concluded that the two plants of Quimobásicos now produced only HCFC-22.

8. Quimobásicos produced NIL MT of CFC-11 and CFC-12 in the current audit period.
9. The CFC-11 and CFC-12 closing stock verified at the end of December 2005 was 3,001 MT. Due to sales in the period January to April 2006, the closing inventory at the end of April 2006 was 2,671 MT.

<table>
<thead>
<tr>
<th></th>
<th>31 December 2005</th>
<th>30 April 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closing Stock of raw material CTC</td>
<td>48.4 MT</td>
<td>48.4 MT</td>
</tr>
<tr>
<td>Closing Inventory of CFC-11</td>
<td>248 MT</td>
<td>187 MT</td>
</tr>
<tr>
<td>Closing Inventory of CFC-12</td>
<td>2,753 MT</td>
<td>2,484 MT</td>
</tr>
</tbody>
</table>

10. It was reported that there was no incident or occurrence leading to major loss of finished product. The auditors verified this by examining relevant records.

11. The audit confirmed that the major changes to convert Plant 2 from CFC-11/CFC-12 mode to HCFC-22 mode were carried out by the enterprise. The auditors found the modifications satisfactory and verified the ongoing modification activities till the date of the audit.

12. The auditors however suggested a yearly audit until 2010 since these equipment and process changes were minor in nature and CFC production could be resumed without need for major modification or procurement.
SUBSECRETARÍA DE GESTIÓN PARA LA PROTECCIÓN AMBIENTAL

DIRECCIÓN GENERAL DE GESTIÓN DE LA CALIDAD DEL AIRE Y REGISTRO DE EMISIONES Y TRANSFERENCIA DE CONTAMINANTES

OFICIO DGGCARETCI 293/05

México, D. F., a 6 de septiembre de 2005

C.P. SERGIO LOZANO GARCÍA
DIRECTOR GENERAL
QUIMOBASICOS, S.A. DE C.V.
PRESENTE

Por este conducto se notifica a usted, que a partir de esta fecha, quedan canceladas las importaciones de Tetrachloruro de Carbono (CCl₄) para su empresa, QUIMOBASICOS, S.A. de C.V. Asimismo, cualquier autorización de importación de CCl₄ expedida a favor de QUIMOBASICOS, S.A. de C.V., que no se haya ejercido hasta la fecha, queda anulada.

Esta resolución se emite debido a que la importación de Tetrachloruro de Carbono (CCl₄) estaba autorizada a su empresa específicamente para la producción de clorofluorocarbonos (CFC's), misma que se cerró a partir del 25 de agosto del presente año.

Sin otro particular, nos ponemos a sus órdenes para cualquier aclaración.

ATENTAMENTE

SUFRAJO EFECTIVO. NO REELECCIÓN
LA DIRECTORA GENERAL

M. en C. ANA MARÍA CONTRERAS VIGIL

M. en C. Daniel Chacón Anaya, Director General de Gestión Integral de Materiales y Actividades Riesgosas, SEMARNAT. Presente.
Lic. Francisco Serrano Aramendi, Administrador Central de Laboratorio y Servicios Científicos, SAT. Presente.
Lic. Agustín Sánchez Guesvara, Coordinador de la Unidad de Protección a la Capa de Ozono. Presente.
AMCV/ASG/hsr
C.P. Sergio Lozano Garcia
General Director
QUIMOBASICOS S.A. de C.V.

This is to notify you, that as of this date, the imports of Carbon Tetrachloride (CTC) for your company QUIMOBASICOS S.A. de C.V. are cancelled. Likewise, any authorization of imports of CTC issued in favour of QUIMOBASICOS S.A. de C.V., that has not been used until to date, is annulled.

This resolution is issued since the import of Carbon Tetrachloride was authorized to your company specifically for the production of Chlorofluorocarbons (CFC’s), which was closed on 25 August of this year.

We are at your disposal for any further clarification.

Yours faithfully

M. en C. Ana Maria Contreras Vigil
Director General