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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Sixty-first Meeting
Montreal, 5-9 July 2010

CONSUMPTION ARISING FROM HCFC-141B CONTAINED IN PRE-BLENDED FOAM CHEMICALS (POLYOLS) (DECISION 59/12 AND 60/50)

Introduction

1. This document, prepared in response to decision 59/12, presents an analysis of polyol systems containing HCFC-141b used in the manufacture of foams, and the implications for the Multilateral Fund.

2. At its 59th Meeting, the Executive Committee discussed an issue related to the use of HCFC-141b blowing agent pre-blended in polyols for foam production and whether this use constitutes consumption under the Montreal Protocol. The issue arose from two foam project proposals submitted by two Article 5 countries where the HCFC-141b used as blowing agent was imported pre-mixed in the polyols of the foam formulation systems. In both cases, the import of the amounts of HCFC-141b contained in the pre-mixed[1] polyols had not been reported by the countries under Article 7 of the Protocol at that time.

3. The Executive Committee, *inter alia*, requested the Secretariat, "in consultation with the Ozone Secretariat, to prepare for the 61st Meeting a brief discussion document outlining the implications for Article 5 Parties and the Multilateral Fund associated with the import and export of HCFC-based pre-blended polyols, taking into account all relevant decisions by Meetings of the Parties and the Executive Committee, and outlining the policy issues and their related technical and economic implications requiring consideration by the Committee". The Committee also requested bilateral and implementing agencies to provide the Secretariat with any information related to the production, export, import, and/or use of pre-blended polyols (decision 59/12).

Scope of the document

4. For the preparation of this document:

(a) The Ozone Secretariat provided input on the issue of HCFC-141b-based polyol systems in light of relevant decisions adopted by the Parties and recommendations made by the Implementation Committee under the Non-compliance Procedure for the Montreal Protocol;

(b) The Ozone Secretariat also provided HCFC-141b consumption and production data reported by the Parties under Article 7 of the Protocol;

(c) Implementing agencies submitted preliminary information on HCFC-based pre-blended polyols, being collected as part of HPMP preparation. Also, UNEP prepared and sent a simple questionnaire on pre-blended polyols to ozone units. Although the information collected was limited, it helped provide a better understanding of the implications of the issue;

(d) Implementing agencies expressed their views on the issue based on experience gained during the phase-out of CFC-11 contained in pre-blended polyols foam systems;

(e) The Secretariat compiled information from documents and reports of the meetings of the Parties, the Implementation Committee and the Executive Committee, where the issue of ODS in pre-blended polyol systems has been addressed, as shown in the table below. An extract of relevant paragraphs from these policy bodies' meeting reports is presented in Annex I;

[1] The terms "pre-blended" and "pre-mixed" are used interchangeably in literature.

Montreal Protocol body	Meeting	Decision	Document
Parties	1st (May 1989)	I/12	UNEP/OzL.Pro.1/5
Implementation Committee	25th (December 2000)		UNEP/OzL.Pro/ImpCom/25/2
Parties	12th (December 2000)		UNEP/OzL.Pro.12/9
Executive Committee	34th (July 2001)	34/20	UNEP/OzL.Pro/ExCom/34/58
Implementation Committee	26th (July 2001)		UNEP/OzL.Pro/ImpCom/26/5
Implementation Committee	27th (October 2001)		UNEP/OzL.Pro/ImpCom/27/4
Parties	14th (November 2002)	XIV/7	UNEP/OzL.Pro.14/9

(f) The Secretariat also conducted a limited review of past actions of the Executive Committee to provide some historical perspective to the issue; and

(g) In accordance with decision 60/4(b)(i), the Secretariat updated the country programme data reporting format to include information relevant to HCFC phase-out, adding specific questions on HCFC-141b in imported pre-blended polyol systems. The revised format was sent to Article 5 countries in April 2010.

5. The following additional sources of information were also consulted:

(a) Project proposals for the phase-out of HCFC in foam applications in eight Article 5 Parties that have been submitted for consideration by the Executive Committee[2];

(b) The Secretariat's inventory of approved projects database[3], with a view to identifying the sizes and the nature of CFC-11 foam enterprises that were converted to alternative technologies and their applicability to conversions from HCFCs to a non-ODS technology; and

(c) The 2002 report of the Rigid and Flexible Foams Technical Options Committee (March 2003).

6. This document provides a brief technical background on pre-blended polyols, discusses the policy, technical and cost implications of the issue, and presents conclusions and a recommendation for consideration by the Executive Committee.

Technical background on pre-blended polyols

7. The polyurethane foam industry is one of the largest segments of the plastics industry. The typical process method of polyurethane foams is by mixing two components: One component, commonly known as component "A", contains the isocyanate. The other component, "B", contains the polyol premixed with other chemical ingredients (such as flame retardants or additives). An auxiliary physical blowing agent (such as CFC-11 or HCFC-141b)[4] is often required to form the polyurethane foam. In many cases, the blowing agent is pre-mixed in component "B". Both components are stored and transported in separate containers. When components "A" and "B" are mixed, they chemically react and the polyurethane foam is formed. These components are formulated by systems houses which tend to supply them in separate containers to foam enterprises in a number of different countries either directly or through chemical

[2] Projects in China, Colombia, Croatia, Dominican Republic, the former Yugoslav Republic of Macedonia, Mexico, Pakistan and Turkey.

[3] The inventory of approved projects is the Secretariat's main database on projects funded under the Fund, providing records of all projects approved by the Executive Committee.

[4] CFC-11 was universally used as auxiliary blowing agent for all types of polyurethane foams. However, CFC-11 has been replaced to non-ODS blowing agent in the majority of applications except for rigid insulation and integral skin applications where HCFC-141b technology was selected for various reasons.

suppliers, as most countries' foam production is not sufficient to ensure the economic viability of a dedicated systems house.

8. Large foam manufacturing enterprises, such as manufacturers of domestic appliances or enterprises with continuous production lines for panels, or blocks, blend all chemical ingredients by themselves in-house. In the majority of these cases, the blowing agent is purchased separately as a stand-alone chemical. Smaller foam producers normally purchase already pre-formulated components "A" and "B" from systems houses or chemical suppliers, in order to avoid additional cost of installing and operating pre-blending equipment and facilities.

Policy considerations with regard to pre-blended polyols

9. When consulted, the Ozone Secretariat noted that only the Parties can interpret the Montreal Protocol and only the Executive Committee and/or the Parties can define an "eligible incremental cost". On the specific issue of pre-blended polyols, the Ozone Secretariat emphasized some relevant points from previous actions and decisions adopted by the Parties, namely:

(a) Subparagraph (e)(iii) of Decision I/12A of the First Meeting of the Parties, lists "a polyurethane pre-polymer or any foam containing, or manufactured with, a controlled substance" as not being a controlled substance;

(b) Annex D of the Montreal Protocol[5] ("list of products containing controlled substances specified in Annex A"), lists "pre-polymers" as products;

(c) The case of India was discussed at the 25th meeting of the Implementation Committee in 2000. India was seeking to revise its CFC consumption upwards since it had not included in previous data reports CFC-11 contained in pre-mixed/pre-blended polyols. However, the Implementation Committee, referred to decision I/12A and Annex D of the Montreal Protocol as a basis for rejecting India's polyol consumption;

(d) India's polyol consumption was again discussed at the 12th Meeting of Parties, where no decision was taken to reverse the Implementation Committee's views.

10. In regard to official data reporting, the Ozone Secretariat has advised that when Parties report import and/or export data, they normally do not provide details on the nature of packaging of the imports/exports, or information on the type of product or substance being imported/exported (e.g., whether it is a blend, mixture or pure substance). Furthermore, Parties do not usually report on the intended use of imports/exports, except where explicitly requested by the Montreal Protocol (i.e., quarantine and pre-shipment, and feedstock uses) or by decisions of the Parties (i.e., essential, critical and laboratory uses). Therefore, the Ozone Secretariat does not usually receive information on other types of uses.

11. Recently, the Ozone Secretariat received requests by several Article 5 Parties to revise their historically reported HCFC consumption data, in some cases to include the amounts of HCFC-141b pre-blended in polyols. Given the decisions and previous discussions by the Parties and the Implementation Committee on the treatment of polyols, and taking into account that the Ozone Secretariat cannot provide any legal interpretation of the provisions of the Protocol[6], the Ozone Secretariat felt that it was important to highlight the issue for further consideration by the Parties before taking any final

[5] Adopted by the 3rd Meeting of the Parties as required by paragraph 3 of Article 4 of the Montreal Protocol.
[6] Decision XVI/34(b).

decisions on the data requests. The Ozone Secretariat has, accordingly, included this matter for consideration by the Parties at the 30th OEWG Meeting[7].

Technical and cost implications

12. The issue of CFC-11 in imported pre-blended polyols was brought to the attention of the Parties only in December 2001, when the Implementation Committee considered the request by one Party to revise its consumption data to take into account the amounts of CFCs contained in polyol systems. By that time, the CFC baseline for compliance had been established for all Article 5 Parties; the first compliance obligation (the CFC baseline freeze) had entered into effect; and 886 foam projects to phase-out 46,000 ODP tonnes of CFC-11 in 47 Article 5 Parties had already been approved by the Executive Committee[8]. Some enterprises that were mixing all the chemicals in their facilities opted to convert to HCFC-141b using the two component process (i.e., the HCFC-141b pre-blended in the polyol), which resulted in lower incremental costs to the Fund as there was no need to replace or retrofit the pre-mixing equipment in the baseline.

13. The Parties continued deliberations on the issue of polyol systems up to the end of 2001[9]. During that same year, the Executive Committee adopted the strategic planning of the Multilateral Fund and "agreed that further funding must be predicated on a commitment by the country to achieve sustainable permanent aggregate reductions in consumption and production, as relevant" (decision 35/57). The country driven approach introduced by decision 35/57 meant that Parties took responsibility for the implications of projects submitted for funding on their remaining fundable CFC consumption. Given that the amounts of CFC-11 phased out were deducted from a country's assessed allowable CFC consumption based on Article 7 data, approval of a project where the CFC consumption involved had not been reported was done at the expense of the reported data, resulting in a reduced level of eligible consumption for funding in other sectors. For this reason, and the need to assist small- and medium-size enterprises to phase out the use of CFCs, projects for the conversion of foam enterprises using CFC-11 pre-blended in polyols were approved irrespective of the source of the pre-blended polyol.

Data reporting and consumption

14. As the Ozone Secretariat clearly indicated, it is not possible to discern from the reports submitted by the Parties under Article 7, whether the HCFC-141b is imported as a stand-alone substance or blended with other substances. However, the review of available information resulted in the following observations:

(a) Nearly 50 per cent of all foam enterprises that converted from CFC-11 to alternative technologies were small-scale producers, with consumption below 20 metric tonnes each. These enterprises' combined CFC consumption was about 20 per cent of the total consumption. Between 20 and 25 per cent of the enterprises could be considered medium-scale producers, with consumption ranging from 20 to 50 metric tonnes each[10]. The majority of these enterprises purchased CFC-11 pre-blended polyols, avoiding the need to invest in in-house premixing stations. A similar categorization of HCFC-based foam enterprises in Article 5 countries is expected;

(b) About 85,000 metric tonnes (9,350 ODP tonnes) of HCFC-141b were reported as

[7] UNEP/OzL.Pro.WG.1/30/2/Add.2.
[8] Inventory of approved projects database.
[9] In 2001, 92 additional foam projects were approved for 18 Article 5 countries to phase-out 6,360 ODP tonnes of CFCs.
[10] Experience from the conversion of CFC foam enterprises converted to non-CFC technologies, as described in Annex III of document UNEP/OzL.Pro/ExCom/55/47.

consumption by 69 Article 5 countries in 2008 (see Annex II of the present document)[11]. Part of this consumption is related to HCFC-141b in imported pre-blended polyols, although the actual number is unknown[12]. Preliminary estimates indicate that HCFC-141b in imported polyol systems could represent between 10 to 15 per cent of the total reported consumption;

(c) Other Parties importing polyol systems are not reporting the HCFC-141b contained therein as consumption[13]. These Parties could continue to import HCFC-141b-based polyol systems indefinitely, as long as they are available. According to the policies of the Multilateral Fund, no assistance could be provided for the introduction of alternative polyol systems in those countries;

(d) Some Parties with enterprises manufacturing HCFC-141b-based polyol systems for the local and export markets are reporting the total amount of HCFC-141b imported as consumption, but are not reporting the amounts contained in exported polyols (between 10 and 20 per cent) as export under Article 7[14]. This situation could result in double-counting of consumption if both the Party exporting polyol systems and the Party importing those polyol systems report the HCFC-141b contained therein as consumption.

Polyol systems regarded as a product

15. The implications of regarding polyol as a product and therefore not to regard the HCFC-141b premixed in it as a controlled substance, regardless of whether they were formulated locally or imported, are the following:

(a) Article 7 data reports would need to be reviewed in cases where Article 5 countries included the amount of HCFC-141b in imported polyols systems as consumption under Article 7. This issue could be particularly important in the 40 to 50 Article 5 countries with relatively low levels of reported consumption of HCFC-141b (below 150 metric tonnes), as funding the phase-out of foam enterprises during the first stage of their HPMPs would enable most of them to meet the freeze and the 2015 compliance targets, and possibly the complete phase-out of HCFC-141b (as the number of enterprises is expected to be small);

(b) The only enterprises that would be eligible for assistance from the Multilateral Fund, would be foam enterprises that purchase HCFC-141b separately and mix it with other chemical ingredients *in situ*, and the systems houses themselves;

(c) The funding required for the conversion of systems houses alone, without giving technical and financial support to their downstream foam enterprises, is relatively small, as it only requires modifying some equipment items in the baseline and purchasing

[11] This consumption does not include some 10,600 metric tonnes (1,166 ODP tonnes) consumed in 2008 by Republic of Korea, Singapore and the United Arab Emirates, which have so far not received assistance from the Multilateral Fund.

[12] Preliminary reports submitted by the implementing agencies for Argentina, Indonesia, Nigeria.

[13] Project proposals submitted to the 59th Meeting by the Dominican Republic (UNEP/OzL.Pro/ExCom/59/30) and the former Yugoslav Republic of Macedonia UNEP/OzL.Pro/ExCom/59/44). Preliminary reports submitted by the implementing agencies for Costa Rica, Cuba, Indonesia, Jamaica, Panama, Peru, Paraguay, Trinidad and Tobago.

[14] For example, in Colombia, 303.0 metric tonnes (33.3 ODP tonnes) of HCFC-141b were contained in exported polyol systems, but only 10.1 metric tonnes (1.1 ODP tonnes) of HCFC-141b were reported as export. In Mexico, 750 metric tonnes (882.5 ODP tonnes) of HCFC-141b were exported in polyol systems, but only 107.2 metric tonnes (11.8 ODP tonnes) of HCFC-141b were reported as export. It is unknown, in both cases, whether the HCFC-141b was exported as a stand-alone substance or contained in polyol systems.

additional testing equipment. As several systems houses are partially or totally owned by non-Article 5 corporations[15], the levels of funding for their conversion would be adjusted according to their foreign ownership;

(d) The large majority of the small and medium-sized foam enterprises using pre-blended polyols, would continue to purchase HCFC-based formulations that meet their needs until the supply is depleted;

(e) Only a few foam enterprises currently purchasing pre-blended polyols would be able to install additional equipment to mix all the chemical ingredients, including HCFC-141b, in their facilities. These enterprises would then be eligible to receive assistance from the Fund as they would be reporting the HCFC-141b as consumption. The cost to the Fund could be higher, as additional funding might be requested for new pre-mixing equipment;

(f) Any foam enterprise that has been converted to non-HCFC foam blowing technology could start using HCFC-141b-based pre-blended polyol, particularly if the alternative technology selected resulted in higher operating costs.

16. The assessment of the funding requirement for the 2009-2011 replenishment of the Multilateral Fund[16] was prepared after the Parties had agreed on the accelerated phase-out of HCFCs. The assessment in the report was based on the overall consumption and production data reported by the Parties under Article 7. In regard to HCFC-141b, the assessment considered the total amount reported by the Parties, irrespective of whether it was imported and/or exported as a stand-alone substance or as a component in polyol systems. Similarly, the updated 2010-2012 model rolling three-year phase-out plan submitted to the 59th Meeting[17] was based on overall HCFC data reported by Article 5 countries under Article 7.

17. The above two reports assumed that the distribution of the amounts of HCFC-141b to be phased out in order to enable Article 5 countries to meet their compliance targets might have been overestimated in countries that exported pre-blended polyols and underestimated in countries that imported pre-blended polyols and did not report the HCFC-141b therein as consumption. However, the overall HCFC-141b consumption level remains the same.

Conclusions

18. During the phase-out of CFCs, a large number of enterprises used CFC-11 pre-blended polyols for the production of foams. A similar situation is expected during the phase-out of HCFC-141b used as a blowing agent. Foam operations in the majority of enterprises depend on the use of pre-blended polyols, either locally manufactured or imported from other countries.

19. The approach being followed by the Parties in reporting import and export of ODS in fully formulated polyols is not consistent:

(a) Some Parties importing polyol systems are not reporting the HCFC-141b contained therein as consumption. Conversion of their foam enterprises to non-HCFC-141b formulations would not assist the Parties in meeting their compliance targets, as no actual phase-out would have occurred;

(b) Other Parties regard the HCFC-141b in imported polyol systems as consumption and report it accordingly to the Ozone Secretariat. These Parties could receive assistance from

[15] About 24 per cent of polyol systems in Mexico are manufactured by systems houses owned by non-Article 5 companies.
[16] TEAP Replenishment Task Force (document UNEP/OzL.Pro.20/6).
[17] UNEP/OzL.Pro/ExCom/59/7.

the Fund to convert their foam enterprises;

(c) It appears that countries exporting fully formulated polyol systems which were locally manufactured, are not reporting the amount of ODS contained in the exported systems under Article 7, resulting in double-counting consumption.

20. Therefore, any consideration on how to treat HCFC-141 contained in imported pre-blended polyols, and whether or not HCFC-141b premixed in polyol is considered a control substance by virtue of the polyol being considered a product, would have implications on the HCFC phase-out strategies of Article 5 countries as well as for the level of funding associated with those strategies. The Ozone Secretariat has drawn the attention of the Parties to the issue of polyols for further consideration.

Recommendations

21. The Executive Committee may wish to consider the information on and analysis of HCFC-141b pre-mixed in polyols contained in document UNEP/OzL.Pro/ExCom/61/53 in light of the discussion on the issue by the Parties to the Montreal Protocol during the 30th Meeting of the Open-ended Working Group.

Annex I

Extract from documents and reports of the meetings of the Implementation Committee and the Parties on ODS in pre-mixed polyols

Report of the First Meeting of the Parties (UNEP/OzL.Pro.1/5)

Decision I/12(A): Clarification of terms and definitions

To agree to the following clarification of the definition of controlled substances (in bulk) in article 1 paragraph 4 of the Montreal Protocol:

(a) Article 1 of the Montreal Protocol excludes from consideration as a "controlled substance" any listed substance, whether alone or in a mixture, which is in a manufactured product other than a container used for transportation or storage;

(b) Any amount of a controlled substance or a mixture of controlled substances which is not part of a use system containing the substance is a controlled substance for the purpose of the Protocol (i.e. a bulk chemical);

(c) If a substance or mixture must first be transferred from a bulk container to another container, vessel or piece of equipment in order to realize its intended use, the first container is in fact utilized only for storage and/or transport, and the substance or mixture so packaged is covered by Article 1, paragraph 4 of the Protocol;

(d) If, on the other hand, the mere dispensing of the product from a container constitutes the intended use of the substance, then that container is itself part of a use system and the substance contained in it is therefore excluded from the definition;

(e) Examples of use systems to be considered as products for the purposes of article 1, paragraph 4 are inter alia:

  (i) An aerosol can;

  (ii) A refrigerator or refrigerating plant, air conditioner or air-conditioning plant, heat pump, etc.;

  (iii) A polyurethane prepolymer or any foam containing, or manufactured with, a controlled substance;

  (iv) A fire extinguisher (wheel or hand-operated) or an installed container incorporating a release device (automatic or hand-operated);

(f) Bulk containers for shipment of controlled substances and mixtures containing controlled substances to users include (numbers being illustrative), *inter alia*:

  (i) Tanks installed on board ships;
  (ii) Rail tank cars (10-40 metric tons);
  (iii) Road tankers (up to 20 metric tons);
  (iv) Cylinders from 0.4 kg to one metric ton;
  (v) Drums (5-300 kg);

(f) Because containers of all sizes are used for either bulk or manufactured products, distinguishing on the basis of size is not consistent with the definition in the Protocol. Similarly, since containers for bulk or manufactured products can be designed to be rechargeable or not rechargeable, rechargeability is not sufficient for a consistent definition;

(g) If the purpose of the container is used as the distinguishing characteristic as in the Protocol definition, such CFC or halon-containing products as aerosol spray cans and fire extinguishers, whether of the portable or flooding type, would therefore be excluded, because it is the mere release from such containers which constitute the intended use.

Report of the 25th Meeting of the Implementation Committee (UNEP/OzL.Pro/ImpCom/25/2)

13. A member of the Ozone Secretariat drew attention to the communication from India by means of which India had added about 4,000 ODP tons to its base level of CFC consumption and also to the 1999 consumption figure. India explained that it had earlier wrongly ignored the CFCs in imported polyols for foam production, which had now been included.

14. The observer from India explained that UNDP was completing a detailed ODS data collection effort in the foam sector under the Multilateral Fund-approved Foam Strategy project. However, the Government already knew that levels of CFC-11 used in the foam sector were significantly above what it had reported to the Ozone Secretariat in previous years. CFC-11 in pre-mixed/pre-blended polyols had not been included in previous data reports since the customs and environmental authorities had not realized that several polyols contained CFCs. The Government had informed the Ozone Secretariat of its preliminary estimate that CFC 11 baseline (1995-1997) consumption and current consumption for 1999 would increase by around 4,000 tons. However, that was only a preliminary estimate and the situation was being reviewed, so the Committee should not be unduly alarmed. India did believe, however, that CFCs contained in pre-mixed/pre-blended polyol imports were controlled substances and that that was the case in several Article 5 Parties.

15. The representative of UNDP added that, in India, CFC-11 was used in rigid foam applications, in flexible moulded foams and in integral skin foams. It was only during the preparation of an SME group rigid foam project in 1999 that UNDP had found that domestic ODS producers had supplied around 700 tons of CFC-11 in pre-mixed/pre-blended polyols. However, it had now been found that imported CFC-11 in pre-mixed/pre-blended polyols had been used for rigid foams (1,225 tons), flexible moulded foams (750 tons) and integral skin foams (1,350 tons), giving a total of 3,325 tons of imported CFC-11 blends. Further, the use of CFC-11 in flexible moulded and integral skin foams had increased markedly only since 1996, while the country programme had been approved in 1993. The total of 3,325 tons had been imported under Open General Licences and the Government was now aware that its customs codes needed to be revised to identify imported polyols containing CFCs and control their import. Meetings had already been held between the Ministries of Commerce and Environment, with the participation of industry, to start the process. The data were being reviewed in detail to eliminate any inconsistencies. He also mentioned that projects had already been funded that covered conversion in several enterprises which had used the imported CFC-11 blends, and that the data correction reflected only what had been found during the recent ODS consumption surveys in the foam sector.

16. The Committee agreed to draw India's attention to decision I/12 A, and especially sub-paragraph (e) (iii), which made clear that polyols were to be regarded as a product under the terms of the Montreal Protocol so that CFCs in polyols should not be counted as consumption by the importing country. Some members pointed out that in Annex D, adopted at the Third Meeting of the Parties, polyols (pre-polymers) were listed as products containing CFCs and not as controlled substances. A member of the Secretariat observed that that could result in consumption phased out by the Multilateral Fund projects in a country to

exceed the reported consumption by that country, but the Committee felt that no difficulty was raised by such a situation.

Report of the 12th Meeting of the Parties (UNEP/OzL.Pro.12/9)

III. Discussion on the issues and on draft decisions
IV. Compliance issues considered by the Implementation Committee

22. He then drew attention to the fact that India had reported that levels of use of CFC-11 in its foam sector were significantly above what had previously been reported, affecting both its current and its baseline data. The reason was the presence of CFC-11 in pre-mixed/pre-blended polyols, both domestically produced and imported, which had not previously been detected. After hearing comments by an observer from India, the Committee had agreed to draw India's attention to decision I/12 A, subparagraph (e) (iii), making clear that such pre-mixed/pre-blended polyols were to be regarded as products under the terms of the Montreal Protocol, so that CFCs in polyols should not be counted as consumption by the importing country. The representative of India expressed the view that polyols mixed with CFCs used in the foam sector should be regarded as a raw material, not a product. Projects had been funded and were to be funded to phase out CFCs in industries using polyols premixed with CFCs, and that might result in the consumption phased out, or to be phased out, exceeding the baseline reported by the country. That should then pose no difficulty. Another representative expressed strong support for the finding of the Implementation Committee and suggested that the technical issue raised by India regarding the funding eligibility of related projects would be more appropriately addressed in a different forum.

Final report of the 34th Meeting of the Executive Committee (UNEP/OzL.Pro/ExCom/34/58)

24. At the 34th Meeting of the Executive Committee, its Sub-Committee on Project Review considered an issue related to CFC-11 contained in pre-blended chemicals imported by Article 5 countries for use in the manufacture of foam. The issue had been discussed at the 25th Meeting of the Implementation Committee, where attention had been drawn to Decision I/12 A of the First Meeting of the Parties to the Montreal Protocol. That decision made it clear that pre-blended polyols were to be regarded as a product under the terms of the Montreal Protocol, which in turn meant that CFCs in polyols should not be counted as consumption by the importing country. Having considered the recommendation of its Sub-Committee, the Executive Committee decided to consider the issue at its 35th Meeting, in the light of any relevant consideration of the matter by the Implementation Committee (decision 34/20)[18].

Report of the 26th Meeting of the Implementation Committee (UNEP/OzL.Pro/ImpCom/26/5)

Pre-mixed polyols

63. The Committee addressed the issue of whether the classification of pre-mixed polyols as non-controlled substances under the Montreal Protocol provided a loophole for continued CFC consumption, and how to prevent that situation.

64. The Implementation Committee agreed to recommend that the Meeting of the Parties should decide that countries that used CFCs to blend pre-polymers (pre-mixed polyols) were to count that use as CFC consumption. If such products were then exported, that would count against the consumption allowance in the exporting countries. The Committee also noted a technical question on the definition of polyols and that it might be useful for the Meeting of the Parties to seek further guidance from the Technology and Economic Assessment Panel on the issue.

[18] Subsequent to the 34th Meeting, the issue on pre-mixed polyols was not further considered by the Executive Committee.

Draft decisions of the 13th Meeting of the Parties (UNEP/OzL.Pro.13/9)

(Draft) Decision XIII/16: Pre-mixed polyols

1. To clarify that Parties that use CFCs to blend pre-polymers (pre-mixed polyols) are to count that use as CFC consumption. If such products are then exported, that will count against the consumption allowance in the exporting Parties;

2. To accept the technical definition of polyols as provided by the Technology and Economic Assessment Panel to mean… (Source: Report of the Implementation Committee, UNEP/OzL.Pro/ImpCom/26/5, paragraph 64).

Report of the 27th Meeting of the Implementation Committee (UNEP/OzL.Pro/ImpCom/27/4)

49. With regard to paragraphs 58 (date for reporting of data), 60 (reporting of historical data), 62 (adjustment of reported 1995–97 baseline data) and 64 (pre mixed polyols), the Secretariat had produced draft decisions for discussion by the Meeting of the Parties. The Committee agreed, however, that the second part of the draft decision on polyols, referring to a technical definition of polyols to be provided by the Technology and Economic Assessment Panel, was not an accurate reflection of the Committee's discussions and should be deleted and a corrigendum to document UNEP/OzL.Pro.13/9 should be issued.

Report of the Fourteenth Meeting of the Parties (UNEP/OzL.Pro.14/9)

Decision XIV/7: Monitoring of trade in ozone-depleting substances and preventing illegal trade in ozone depleting substances

Mindful of Decision XIII/12 requesting the Ozone Secretariat to undertake a study dealing with issues related to monitoring of trade in ODS and preventing illegal trade in ODS listed in Decision XII/10 and present a report with practical suggestions to the Open-ended Working Group at its twenty-second meeting, in 2002, for consideration of the Parties in 2002,

Acknowledging with appreciation the work of the Ozone Secretariat and all organizations and individuals which assisted in the preparation of the report,

Acknowledging with appreciation the proposal from the Ozone Secretariat, based on the work done by the ODS Customs Codes Discussion Group convened under Decision X/18, on national subdivisions to customs codes for classification of mixtures containing ODS, which is presently being processed by the World Customs Organization,

Recalling previous decisions of the Parties dealing with monitoring of trade in ODS, customs codes, ODS import and export licensing systems and prevention of illegal trade in ODS, namely Decisions II/12, VI/19, VIII/20, IX/8, IX/22, X/18 and XI/26,

Understanding the importance of actions aimed at improvement of monitoring of trade in ODS and preventing illegal trade in ODS for timely and smooth phase-out of ODS according to the agreed schedules,

1. To encourage each Party to consider means and continued efforts to monitor international transit trade;

2. To encourage all Parties to introduce economic incentives that do not impair international trade but which are appropriate and consistent with international trade law, to promote the use of ODS

substitutes and products (including equipment) containing them or designed for them, and technologies utilizing them; and to consider demand control measures in addressing illegal trade;

3. To urge each Party that has not already done so to introduce in its national customs classification system the separate sub-divisions for the most commonly traded HCFCs and other ODS contained in the World Customs Organization recommendation of 25 June 1999 and request that Parties provide a copy to the Secretariat; and to urge all Parties to take due account of any new recommendations by the World Customs Organization once they are agreed;

4. To provide the following further clarification of the difference between a controlled substance, or a mixture containing a controlled substance, and a product containing a controlled substance contained in Article 1 of the Montreal Protocol and further explained in Decision I/12A:

(a) No matter which customs code is allocated to a controlled substance or mixture containing a controlled substance, such substance or mixture, when in a container used for transportation or storage as defined in Decision 1/12A, shall be considered to be a "controlled substance" and thus shall be subject to the phase-out schedules agreed upon by the Parties;

(b) The clarification contained in subparagraph (a) above concerns, in particular, controlled substances or mixtures containing controlled substances classified under customs codes related to their function and sometimes wrongly considered to be "products", thus avoiding any controls resulting from the Montreal Protocol phase-out schedules.

Annex II

HCFC-141b consumption reported by Article 5 countries under Article 7 (metric tonnes)

In regard to HCFC-141b consumption, one Party's consumption represents nearly 50 per cent of the total reported by 69 Article 5 countries, while more than 90 per cent of the consumption was by eleven Parties each with a consumption over 1,000 metric tonnes (110 ODP tonnes). Forty Parties have consumption below 60 metric tonnes (6.6 ODP tonnes) of HCFC-141b. HCFC-141b data reported by Article 5 Parties is presented in the table below.

In the last few years, HCFC-141b consumption sharply increased in several Article 5 countries (see Annex II to the present document). Although the reasons for this increase are not yet known, Article 5 countries had indicated at Ozone Officers network meetings that HCFC data collection has been enhanced after the accelerated phase-out of these chemicals was agreed at the 19th Meeting of the Parties. Furthermore, the Ozone Secretariat also advised that it is also possible that there is increased use of HCFC-141b, since producers of HCFCs also show significant growth in their export of the substance.

HCFC-141b reported under Article 7 of the Protocol (metric tonnes)

Country(*)	2005	2006	2007	2008	2009
Algeria			50.0	60.0	51.5
Argentina	297.0	543.4	904.9	711.1	
Armenia					7.5
Bahrain	3.9	4.3	4.3	1.2	
Bangladesh			45.0	120.0	
Belize			0.2	0.6	
Bolivia (Plurinational State of)	0.6	5.4	8.1	12.7	
Bosnia and Herzegovina	66.2	15.0	25.0	44.9	
Botswana	0.1	0.1	0.1	0.1	
Brazil	3,758.5	4,063.9	6,333.8	5,625.7	
Brunei Darussalam				0.7	
Cameroon			25.3	35.5	
Chile	274.5	258.0	390.6	413.7	
China	27,664.2	46,325.1	49,706.3	41,008.6	
Colombia	856.8	871.7	1,431.6	1,250.4	
Costa Rica	16.2	17.2	14.4	23.5	28.3
Croatia	12.2	23.0	31.5	28.0	
Cuba		0.5	13.3		
Democratic People's Republic of Korea				117.6	
Dominican Republic	56.2	1.6	3.2	4.3	
Ecuador				4.3	
Egypt	420.0	587.4	1,411.8	970.1	1,209.0
El Salvador	8.4	26.2	6.0	94.3	
Guatemala	6.5	7.9	11.2	10.3	10.7
Honduras	5.2	12.7	30.2	39.2	16.7
India	2,155.9	2,672.8	4,711.9	12,588.9	
Indonesia	1,635.8	1,526.0	1,007.5	874.2	
Iran (Islamic Republic of)	791.3	894.1	924.8	1,725.8	
Jordan	120.0	125.0	175.0		
Kenya	30.0	31.0	30.5	30.0	
Kuwait	119.3	402.1	287.0	522.0	
Kyrgyzstan			2.0	47.2	
Lao People's Democratic Republic		0.2	0.6		
Lebanon	18.0	21.0	5.5	11.3	

Country(*)	2005	2006	2007	2008	2009
Libyan Arab Jamahiriya	200.0				
Malaysia	899.3	1,153.4	1,280.1	1,206.4	
Maldives				0.2	
Mauritius	2.0	0.4	0.7	2.2	1.4
Mexico	7,308.1	7,166.0	6,951.5	7,459.7	5,503.5
Morocco	80.0	226.0	66.0	125.6	200.9
Namibia				1.6	
Nicaragua				2.0	
Nigeria			242.1	702.3	
Oman				1.5	103.0
Pakistan		150.0	613.0	1,101.9	1,220.0
Panama		4.1	21.1	22.6	
Paraguay	74.2			2.5	
Peru	53.1	4.6	213.0	6.7	
Philippines	407.8	516.4	536.6	604.2	
Saudi Arabia		1,150.0	1,035.0	1,535.0	3,000.0
Serbia		0.2		5.1	
Seychelles	0.3				0.4
South Africa	273.3	759.0	1,295.0	465.8	
Sri Lanka		0.5	6.0	6.9	16.2
Sudan				320.0	
Suriname					0.1
Swaziland	39.4		36.8	21.0	
Syrian Arab Republic	236.9	55.6	59.0	371.3	
Thailand	2,029.1	1,943.4	1,608.7	1,841.6	
The former Yugoslav Republic of Macedonia	18.0	11.0	14.5	13.0	15.7
Trinidad and Tobago					0.3
Tunisia	25.0	25.6	73.9	54.1	5.6
Turkey	1,508.0	1,924.0	2,562.2	2,332.8	
Turkmenistan					0.7
Uruguay	15.0	5.3	16.7	15.5	
Venezuela (Bolivarian Republic of)	227.4	227.4	417.5	186.0	
Viet Nam	325.0	345.0	358.0	367.0	
Yemen		7.2	6.7	9.2	
Zimbabwe	1.4	0.6		0.2	
Total consumption	**52,040.2**	**74,111.3**	**85,005.5**	**85,160.0**	**11,391.4**

(*) Excluding Republic of Korea, Singapore and United Arab Emirates.