

***Handbook on
Critical Use Nominations
for Methyl Bromide***

[Version 3.0]

***Prepared by the
Technology and Economic Assessment Panel
and
Methyl Bromide Technical Options Committee***

Discussion draft

[December 2004]

Disclaimer

The United Nations Environment Programme (UNEP), the Technology and Economic Assessment Panel (TEAP) co-chairs and members, the Methyl Bromide Technical Options Committee (MBTOC) co-chairs and members and the companies and organisations that employ them, in furnishing or distributing this information, do not make any warranty or representation, either express or implied, with respect to the accuracy, completeness, or utility; nor do they assume any liability of any kind whatsoever resulting from the use or reliance upon, any information, material, or procedure contained herein, including but not limited to any claims regarding health, safety, environmental effects of face, efficacy, or performance, made by the source of the information.

Mention of any company, association, or product in this document is for information purposes only and does not constitute a recommendation of any such company, association, or product, either express or implied, by UNEP, the TEAP co-chairs or members, MBTOC co-chairs or members or the companies and organisations that employ them.

Handbook On Critical Use Nominations For Methyl Bromide

Table of Contents

| | |
|---|-----------|
| Disclaimer | 2 |
| Acronyms | 5 |
| Chapter 1 - Introduction..... | 6 |
| 1.1 Genesis and Purpose of Handbook..... | 6 |
| 1.2 Content and Structure | 7 |
| 1.3 Handbook Updates | 7 |
| Chapter 2 – Critical Uses for Methyl Bromide..... | 8 |
| 2.1 Introduction | 8 |
| 2.2 Framework..... | 8 |
| 2.3 Process for nomination for critical use exemption | 12 |
| 2.4. Steps Leading to a Critical Use Exemption..... | 13 |
| 2.5 Information Requirements | 14 |
| 2.6 Process of evaluation, including process within MBTOC | 15 |
| Chapter 3 – Instructions | 15 |
| 3.1 Instructions..... | 16 |
| 3.2 Critical Use Nomination | 16 |
| 3.3 Renomination of Critical Uses for further exemption..... | 17 |
| 3.4 Schedule for Submissions | 18 |
| 3.5 Recommended Forms and Procedure for Nominations and Renominations for Critical Use..... | 20 |
| Form 1..... | 23 |
| Form 2..... | 41 |
| Form 3..... | 57 |
| Appendix A – Excerpts from Protocol Provisions..... | 72 |
| Appendix B – Extracts from Meeting Reports and Decisions of the Parties to the Montreal Protocol Relevant to Critical Uses of Methyl Bromide | 76 |

Discussion draft of 4 November 04

| | |
|---|-----------|
| 1. Extract from: The Report of the Thirteenth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer..... | 76 |
| 2. Decisions on critical uses of methyl bromide..... | 77 |
| Appendix C. Reporting Accounting Framework for Critical Uses of Methyl Bromide..... | 89 |
| Form 1 – Summary form..... | 89 |
| Form 2 – Details of consumption by individual CUE..... | 90 |
| Appendix D. Working procedures of MBTOC in relation to review of CUNs..... | 91 |

Acronyms

| | | |
|-------|---|--|
| CFC | - | Chlorofluorocarbon |
| CUE | - | Critical Use Exemption for Methyl Bromide |
| CUN | - | Critical Use Nomination |
| EMOP | - | Extraordinary Meeting of the Parties |
| MOP | - | Meeting of the Parties |
| MB | - | Methyl Bromide |
| MBTOC | - | Methyl Bromide Technical Options Committee |
| ODS | - | Ozone-Depleting Substance |
| OEWG | - | Open-Ended Working Group |
| Pic | - | Chloropicrin |
| QPS | - | Quarantine and Pre-Shipment |
| TEAP | - | Technology and Economic Assessment Panel |
| TOC | - | Technical Options Committee |
| UNEP | - | United Nations Environment Programme |

Chapter 1 - Introduction

1.1 Genesis and Purpose of Handbook

At the Fourth Meeting of the Parties, methyl bromide was listed as a controlled substance in Annex E of the Protocol. Control measures for methyl bromide are set out in Article 2H of the Protocol. These control measures include allowance for a level of production and consumption of methyl bromide to continue after production phaseout where this material is necessary to satisfy uses agreed by the Parties to be critical uses (Appendix A).

At the Seventh Meeting of the Parties, it was decided to review the applicability of existing essential use criteria and process with regards to evaluating critical uses of methyl bromide in the agricultural sector. The Parties agreed a process in Decision IX/6¹ for nomination for critical uses of methyl bromide.

Noting the need for the non-Article 5(1) Parties to have adequate guidance to enable them to submit nominations for critical use exemptions for consideration at the 15th Meeting of the Parties in 2003, Decision XIII/11 of the Thirteenth Meeting of the Parties called upon the Technology and Economic Assessment Panel (TEAP) to:

“...prepare a handbook on critical-use nomination procedures which provides this information, and the schedule for submission which reflects that currently employed in the essential-use nomination procedure...”

TEAP, with the assistance of its Methyl Bromide Technical Options Committee (MBTOC) developed the "Handbook on Critical Use Nominations for Methyl Bromide" in response to this request. It is intended to assist the Parties in the preparation of critical use nominations for methyl bromide.

This Handbook describes the nomination process for critical use exemptions. It builds on the process for essential use exemptions as it has evolved through Articles of the Protocol and Decisions of the Parties, the procedures followed under the Protocol, and the experience of TEAP and its Technical Options Committees in managing the essential use process.

This third version of the Handbook is revised in response to the wishes of the Parties, particularly those expressed in the Extraordinary Meeting of the Parties (EMOP), and the experience gained

¹ Text of relevant Decisions is given in Appendix B

during the consideration of Critical Use Nominations (CUNs) submitted by the Parties during the 2003 and 2004 rounds of nomination.

1.2 Content and Structure

The Handbook contains three sections: 1) an outline of the critical use process, 2) suggested forms and notes for the submission of critical use nominations, and 3) appendices. The appendices contain provisions of the Montreal Protocol relating to critical use exemptions for methyl bromide, relevant other decisions of the Parties to the Protocol and extracts from meeting reports of the Parties relevant to critical uses.

1.3 Handbook Updates

The Parties and TEAP may revise and update this Handbook as circumstances require. Please consult the Ozone Secretariat for updated handbooks to ensure use of the latest version.

This version was posted on the web in [December 2004]. Decision Ex. I/4(9,k) specifically required TEAP to modify the handbook (version of August 2003) on critical-use nominations for methyl bromide to take the decisions of the EMOP and other relevant information into account, for submission to the Sixteenth Meeting of the Parties.

Chapter 2 – Critical Uses for Methyl Bromide

2.1 Introduction

Parties may nominate uses for a critical use exemption to allow continued use of methyl bromide for non-quarantine and pre-shipment purposes after the phaseout date and where alternatives are not available. For Parties not operating under Article 5(1) production phaseout for non-exempt uses is by 1 January 2005 (Article 2H, as amended). Parties operating under Article 5(1) do not nominate for years prior to their production phaseout (currently scheduled for 2015).

Montreal Protocol provisions relate to the phase-out of production and do not control the use of substances manufactured prior to the phaseout. Thus, Parties do not need to submit nominations to allow the continuing use of such stockpiled methyl bromide. However, consistent with Decision IX/6, consumption and production should be permitted only if methyl bromide is not available in sufficient quantity from existing stocks of banked or recycled methyl bromide, also bearing in mind the developing countries' need for methyl bromide. Further discussion on the use of stockpiles can be found in Decision Ex.I/3 (2,3).

Only Parties to the Protocol can submit nominations. Thus, companies, other organisations and individuals must submit applications to their national governments for their consideration and possible forwarding to the Ozone Secretariat.

Nominations received by [31 January] [15 December] in a given year will be decided by the Parties at their annual meeting of [that] [the subsequent] year. Nominations received after [31 January] [15 December] will be decided the next year.

In an emergency, Parties may notify the Secretariat that they will consume quantities of methyl bromide not exceeding 20 tonnes without prior exemption. The Secretariat and the Technology and Economic Assessment Panel will evaluate this use according to “critical methyl bromide use” criteria and present this information for review and guidance at the next Meeting of the Parties under Decision IX/7 (Appendix B).

2.2 Framework

The nomination and review process for critical use exemptions for methyl bromide (Annex E of the Protocol) follows that which has evolved for essential use exemptions for substances in Annexes A-C of the Protocol. The steps in this process are summarised below.

Article 2 of the Montreal Protocol mandates the phase-out of production and "consumption" of substances that deplete the ozone layer. "Consumption" is defined as production plus imports minus exports. Please note that the Parties are allowed to use stockpiled or recycled substances for as long as they are available after the production phaseout, unless restricted by national regulations and as impacted by Decision IX/6. Article 2H authorises the Parties by decision to permit production and consumption for those uses decided by the Parties to be critical uses.

Article 6 of the Montreal Protocol mandates the creation of expert panels to assist the Parties in assessing the control measures provided for in Article 2. This provision led to the formation of the Technology and Economic Assessment Panel (TEAP) and its Technical Options Committees (TOCs), including the Methyl Bromide Technical Options Committee. All current members of the TEAP, the Technical Options Committees and Task Forces may be found at: <http://www.unep.org/ozone/teap> .

Excerpts from Articles 2 and 6 of the Montreal Protocol relating to critical and essential use exemptions are attached as Appendix A.

At the Ninth Meeting, the Parties set out criteria and procedures for assessing a critical methyl bromide use for the purposes of control measures and exemptions in Article 2 of the Protocol. These Decisions are given in full in Appendix B.

The substantive criteria for a critical use exemption as given in Decision IX/6 are:
"That a use of methyl bromide should qualify as "critical" only if the nominating Party determines that:

- (i) The specific use is critical because the lack of availability of methyl bromide for that use would result in a significant market disruption; and
- (ii) There are no technically and economically feasible alternatives or substitutes available to the user that are acceptable from the standpoint of environment and health and are suitable to the crops and circumstances of the nomination;"

In addition, for Parties not operating under Article 5(1), "that production and consumption, if any, of methyl bromide for critical uses should be permitted only if:

- (i) All technically and economically feasible steps have been taken to minimise the critical use and any associated emission of methyl bromide;
- (ii) Methyl bromide is not available in sufficient quantity and quality from existing stocks of banked or recycled methyl bromide; also bearing in mind the developing countries' need for methyl bromide;
- (iii) It is demonstrated that an appropriate effort is being made to evaluate, commercialise and secure national regulatory approval of alternatives and substitutes, taking into consideration the circumstances of the particular nomination.... Non-Article 5 Parties

must demonstrate that research programmes are in place to develop and deploy alternatives and substitutes....”

The Extraordinary Meeting of the Parties made several decisions within Decisions Ex I/3,4,5 that impact directly on how CUNs should be composed, submitted and evaluated. Some of these decisions are to operate “after 2004” and some to operate “after 2005” or from the “end of 2005”.

Specifically, in Decision Ex I/4:

6. To request any Party submitting a critical-use nomination after 2004 to describe in its nomination the methodology used to determine economic feasibility in the event that economic feasibility is used as a criterion to justify the requirement for the critical use of methyl bromide, using as a guide the economic criteria contained in section 4 of annex I to the present report;

7. To request each Party from 1 January 2005 to provide to the Ozone Secretariat a summary of each crop or post-harvest nomination containing the following information:

- (a) Name of the nominating Party;
- (b) Descriptive title of the nomination;
- (c) Crop name (open field or protected) or post-harvest use;
- (d) Quantity of methyl bromide requested in each year.

The economic criteria contained in Section 4 of Annex 1 of the meeting report of the EMOP (UNEP/OzL.Pro.ExMP/1/3) in relation to CUNs are:

- (a) The purchase cost per kilogram of methyl bromide and of the alternative;
- (b) Gross and net revenue with and without methyl bromide, and with the next best alternative;
- (c) Percentage change in gross revenues if alternatives are used;
- (d) Absolute losses per hectare/cubic metre if alternatives are used;
- (e) Losses per kilogram of methyl bromide requested if alternatives are used;
- (f) Losses as a percentage of net cash revenue if alternatives are used;
- (g) Percentage change in profit margin if alternatives are used.

In Decision Ex. I/4(9,e) TEAP is to review critical-use nominations on an annual basis and apply the criteria set forth in Decision IX/6 and of other relevant criteria agreed by the Parties. Decision XV/54 and Decision Ex I/5(7) instructed TEAP and MBTOC when evaluating CUNs to place them in three categories only: “recommended”, “not recommended” or “unable to assess”.

Decision Ex. I/5(8) requires the reports of the Technology and Economic Assessment Panel and its Methyl Bromide Technical Options Committee, published following those bodies' initial assessment of nominations submitted in 2004 and following the subsequent assessment of any additional information submitted by nominating Parties, should include:

- (a) If the Panel and Committee do not recommend any part of a nomination, a clear description of the nominating Party's request for an exemption and of the reasons why the Panel and Committee did not accept it, including references to the relevant studies, wherever available, used as the basis for such a decision;
- (b) If the Panel and Committee require additional information, a clear description of the information required.

[Decision Ex I/5(2,g) foreshadows further guidance may be given by the adhoc Working Group on MBTOC and 16MOP on the application of the criteria set forth in decision IX/6 that may need to be incorporated here. There may also be decisions on multiyear exemptions from 16MOP following Decision Ex. I/3(6) that may need incorporation.]

Part of Decision Ex. I/4, paragraph 3, is directly relevant to submission of CUNs that are for end of 2005 and thereafter: It related to the submission of national management strategies for phase-out of critical uses of methyl bromide in relation to CUNs. It reads:

3. To request each Party which makes a critical-use nomination after 2005 to submit a national management strategy for phase-out of critical uses of methyl bromide to the Ozone Secretariat before 1 February 2006. The management strategy should aim, among other things:
 - (a) To avoid any increase in methyl bromide consumption except for unforeseen circumstances;
 - (b) To encourage the use of alternatives through the use of expedited procedures, where possible, to develop, register and deploy technically and economically feasible alternatives;
 - (c) To provide information, for each current pre-harvest and post-harvest use for which a nomination is planned, on the potential market penetration of newly deployed alternatives and alternatives which may be used in the near future, to bring forward the time when it is estimated that methyl bromide consumption for such uses can be reduced and/or ultimately eliminated;
 - (d) To promote the implementation of measures which ensure that any emissions of methyl bromide are minimized;
 - (e) To show how the management strategy will be implemented to promote the phase-out of uses of methyl bromide as soon as technically and

economically feasible alternatives are available, in particular describing the steps which the Party is taking in regard to subparagraph (b) (iii) of paragraph 1 of decision IX/6 in respect of research programmes in non-Article 5 Parties and the adoption of alternatives by Article 5 Parties.

2.3 Process for nomination for critical use exemption

Following precedent for nomination and TEAP review of essential and critical use nominations, all CUNs will be reviewed by MBTOC using a calendar year (January 1 to December 31) as a time-frame for approval. **[MBTOC will review one or more than one year included in a CUN put forward by a country and present its recommendation for all such calendar years in its next report after receiving a CUN.]**

Decision IX/6(2) tasked TEAP to review nominations for critical use exemptions submitted by the Parties, and to make recommendations based on the criticality criteria given above.

Note that Decision IX/6 in paragraph 2 specifically assigns the nominating Party responsibility for determining significant market disruption specified in paragraph 1 (a) (i).

Review by TEAP is conducted initially through its Methyl Bromide Technical Options Committee. Members of MBTOC evaluate each nomination and report their review to the MBTOC co-chairs. The draft text of the responses to nominations is discussed via meetings, email, telephone, fax and mail, as appropriate. The results of these reviews are discussed at full meeting(s) of MBTOC. Clarifications may be sought via the Ozone Secretariat from the nominating Party, as necessary. A draft recommendation is prepared and agreed. This is forwarded to TEAP by the MBTOC co-chairs for further review.

TEAP develops recommendations on the nominations and submits its report through the Secretariat by 30 April of that year, which is at least two months prior to the Meeting of the Open-Ended Working Group (OEWG). The OEWG may also choose to comment on the nominations and to recommend to the meeting of the Parties. The Parties take decisions on the nominations at their annual meeting during the last quarter of the year. The schedule for submissions, including opportunities for consultation between MBTOC/TEAP and the nominating Parties, is set out in Section 3.2.

A critical use exemption is granted to the nominating Party for a specific quantity of methyl bromide for a specific time period and use where, under the circumstances of the nomination, there are no economically and technically feasible alternatives. A Party granted a critical use exemption may produce and/or import the specified methyl bromide quantity to meet the needs of those users within its territory that are licensed to use methyl bromide. Any methyl bromide production and

consumption to meet the authorised critical uses, and also quantities authorised but not actually consumed, should be identified in the annual data reporting to the Ozone Secretariat.

[add here: reference to agreed annual reporting process. Draft associated forms are given after nomination forms for new CUEs].

In rare instances, confidential information may be a key element of a nomination. Such confidential information should be clearly indicated in a nomination and will be treated in the same way as data referred to in Dec. I/11. Parties are urged to consolidate similar nominations to minimise the need to include confidential information that can be easily traced to one producer or organisation.

TEAP and MBTOC operate under Terms of Reference published as Annex V of the meeting report of the 8th Meeting of the Parties (UNEP/OzL.Pro.8/12). Working papers and meetings of MBTOC are confidential to the members of MBTOC and TEAP.

2.4. Steps Leading to a Critical Use Exemption

The critical use process consists of the following nine steps:

1. **Application:** An organisation or other entity in a non-Article 5(1) Party to the Protocol makes a specific application for a critical use exemption to the relevant government authority. The government reviews the application and submits the nomination only if technically and economically feasible alternatives are not available and significant market disruption would result from the lack of methyl bromide.
2. **Nomination:** Government authorities submit Critical Use Nomination(s) to the Montreal Protocol Ozone Secretariat for any future year or years. Nominations for any future year received by [31 January] will be considered at the Meeting of the Parties in that year. The Party should name person(s) in its country who are authorised to provide any clarifications sought on the nominations by the Technology and Economic Assessment Panel and its MBTOC. Early submission of nominations is encouraged.
3. **Assignment:** The Ozone Secretariat forwards notice of the nomination to TEAP and its MBTOC. Copies of the complete nomination are forwarded to TEAP and its MBTOC.
4. **Review:** MBTOC reviews the nomination for whether it satisfies the criteria for a critical use established by Decision IX/6 and subsequent guidance from the Parties. During course of evaluation, clarifications, if needed, from person(s) designated by the nominating Party in the nomination. TEAP then reviews the report of MBTOC. may make additional input or changes to the draft. A nomination is either categorised as 'recommended', 'not

recommended' or 'unable to assess'. In the latter case, the Party may be requested via the Ozone Secretariat to submit further information. A nominated quantity of methyl bromide may be 'recommended' partially or fully. Nominations submitted to the Secretariat by [31 January] will be evaluated in the TEAP report to the OEWG, which is prepared by [30 April] of each year. A detailed timetable for the MBTOC/TEAP review is given below (**)

5. **Evaluation:** The OEWG meeting reviews the Panel report and recommends a decision for consideration by the Parties.
6. **Decision:** The Meeting of the Parties decides whether to authorise production and consumption for critical use in accordance with the Montreal Protocol. The Parties may attach conditions to their approval for the critical use.
7. **National Authorisation:** The Party in possession of a critical use exemption authorises the applicant to acquire the controlled substance (methyl bromide) according to the terms of the decision.
8. **Procurement and use:** The Applicant acquires a quantity less-than or equal-to the amount of methyl bromide authorised by the national authority. Please note that the Protocol and national authorities authorise, but do not mandate, production and/or import: each applicant must locate a supplier and negotiate supply.
9. **Reporting:** Users provide the national authority with all information necessary for subsequent auditing and reporting of the authorised use to the Ozone Secretariat, including quantities applied and unused or stored for subsequent authorised use.

2.5 Information Requirements

Information requirements for methyl bromide Critical Use Nominations (CUNs) are different for soil fumigation and postharvest and structural fumigation. Suggested submission forms for CUNs are given in Sections 3.1.1 (Soils) and 3.1.2 (Commodities, Structures and Objects). These forms include detailed instructions and notes on what information is requested by TEAP and MBTOC in order to fulfil its mandate to evaluate CUNs in the light of Decision IX/6. Discussion on information requirements for critical use nominations for soil fumigation (pre-plant) purposes can also be found in the Meeting Report for the Thirteenth Meeting of the Parties, Colombo, November 2001 (see Appendix B).

For nominations submitted in 2006 and thereafter, a national management strategy for phase-out of critical uses of methyl bromide should be included, giving information according to the headings given in Dec. Ex I/4(3).

When considering availability of alternatives to a methyl bromide use for which an exemption is being considered, Parties may be guided by those listed in the 'Index to Methyl Bromide Alternatives'. This index is available at <http://www.unep.org/ozone/teap/Reports/MBTOC/index.asp>. It is an index to alternatives cited in the MBTOC Assessments and TEAP Annual Progress Reports. It is to be updated annually.

2.6 Process of evaluation, including process within MBTOC

The procedure for evaluating critical use nominations is based on Decisions IX/6, XIII/11 and appropriate parts of Decisions Ex. I/3,4,5, as well as this *Handbook on Critical Use Nominations for Methyl Bromide*. The procedure is as follows:

- The Parties submit their nominations in accordance with the procedure set forth in Decision XIII/11 and the Handbook.
- The nominations are submitted to the Ozone Secretariat and the Secretariat forwards them to the MBTOC and TEAP Co-Chairs.
- MBTOC evaluates the nominations following the criteria established by the Parties, principally in Decision IX/6 and as subsequently elaborated. MBTOC has developed a set of "informal ground rules" as internal guidelines to enable consistent scrutiny and evaluation of the nominations.
- The nominations that lack adequate information are identified. Clarifications or additional information are sought on such nominations from the relevant Parties through the Ozone Secretariat.
- MBTOC prepares its interim report that is then reviewed by TEAP at its annual meeting. The recommendations of the TEAP are submitted to the Open-ended Working Group. The nominations that lack sufficient information stand as "unable to assess" at this stage.
- The Open-ended working Group meeting reviews the Panel report and recommends a decision for consideration by the Parties.
- MBTOC prepares a draft final report, on the basis the review by the Open-ended Working Group and of responses to clarifications or additional information sought from the relevant Parties through the Ozone Secretariat, for review by TEAP and publication prior to the Meeting of the Parties.
- The Parties take decisions on the exemptions to be granted at the meeting of the Parties.

Details of operating procedures of MBTOC are given in Appendix D.

Chapter 3 – Instructions

Instructions are given below for submission of new CUNs (Section 3.2) and for nominations for additional year(s) where a CUE has already been approved following a nomination for a particular year (Section 3.3).

3.1 Instructions

Nominations must fully satisfy the criteria in Decision IX/6. All Parties are encouraged to exercise the utmost diligence in their assessment of a use as a critical use in the light of this Decision and to provide detailed rationale for all nominations.

Nominations to the Ozone Secretariat received by [31 January] will be reviewed by TEAP for consideration by the Parties in that same year, i.e. nominations for use in 2006 must be received by [31 January 2005]. A detailed time line for nominations is given in Section 3.2 [replace time line if appropriate by agreed time line from 16MOP].

3.2 Critical Use Nomination

Information required for Critical Use Nominations include material in the following areas:

- data on the availability and technical and economic feasibility of alternatives to the proposed methyl bromide use;
- technically and economically feasible steps to minimise use;
- technically and economically feasible steps to minimise emissions;
- recycling and stockpiling;
- efforts made to secure alternatives;
- quantity of controlled substances requested
- plans for phase-out of critical uses of methyl bromide
- methodology used to determine economic feasibility.

It is the responsibility of the nominating Party to verify that all technically and economically feasible options have been undertaken to reduce use and emissions, and that lack of availability of methyl bromide for the nominated use would lead to significant market disruption in the sense of Decision IX/6.

3.3 Renomination of Critical Uses for further exemption

Holders of single-year exemptions, e.g. nominees approved for single-year exemptions for 2005 and/or 2006 seeking further exemptions for 2007, may reapply for a subsequent year's exemption with simplified nomination requirements.

In assessing renominations for a subsequent year, TEAP and MBTOC will also refer to the original nomination on which the nominee's first year or years of exemption were approved, as well as any supplementary information provided by the nominee in relation to that original nomination. As this earlier information is retained by MBTOC, nominees need not resubmit that earlier information.

Renominations are required to meet all the criteria for Critical Use Exemptions, particularly as set out in decision IX/6 and subsequently elaborated in Ex. I/3,4,5. They are considered on the same schedule as new CUNs.

3.4 Schedule for Submissions

[Note: this is currently subject to revision at 16MOP]

The *minimum* schedule for submission and consideration of CUNs is as follows:

[Prior to January 31 in the year that critical use authorisation is requested]

Applicant organisations prepare and submit critical use applications to national governments.

Governments review applications and prepare critical use nominations, following guidance contained in this "Handbook on Critical Use Nominations for Methyl Bromide".

January 31:² Deadline for critical use nominations to the Ozone Secretariat.

[add here steps in the MBTOC and TEAP process of review]

April 30:² TEAP submits its evaluation of the nominations to the Ozone Secretariat for communication to the Parties.

June - July: OEWG meets and considers the recommendations for critical uses put forward by TEAP.

September - December: The Parties meet and decide whether to allow production for nominated uses. Parties may specify conditions for a particular exemption.]

OR,

The step-by-step process for MBTOC's and TEAP's assessment of nominations is set out in the following table.

| Actions | Indicative completion date |
|---------|----------------------------|
|---------|----------------------------|

² These dates are deadlines established by the Parties.

Discussion draft of 4 November 04

| | |
|---|-------------------------------|
| 1. Parties submit their nominations for critical use exemptions to the Secretariat | [31 January] [15 December] |
| 2. The nominations are forwarded to MBTOC co-chairs for distribution to the subgroups of appointed members | 14 February |
| 3. Nominations in full are assessed by the subgroups of appointed members. The initial findings of the subgroups, and any requests for additional information are forwarded to the MBTOC co-chairs for clearance | 28 February |
| 4. MBTOC co-chairs forward the cleared advice on initial findings and requests for additional information on to the nominating Party concerned and consult with the Party on the possible presumption therein | 14 March |
| 5. Nominating Party develops and submits its response to the MBTOC co-chairs | 28 March |
| 6. MBTOC meets as usual to assess nominations, including any additional information provided by the nominating Party prior to the MBTOC meeting under action 5 and any additional information provided by nominating Party through pre-arranged teleconference, [or through meetings with national experts/observers] advises the nominating Party of any outstanding information regarding the information requested under action 3 for those critical use nominations where it was unable to assess the nomination, and provides its proposed recommendations to TEAP | 11 April |
| 7. TEAP meets as usual in May, among other things, to assess the MBTOC report on critical use nominations and submits the finalized report on recommendations and findings to the Secretariat | early May |
| 8. The Secretariat posts the finalized report on its web site and circulates it to the Parties | mid-May |
| 9. Nominating Party has the opportunity to consult with MBTOC on a bilateral basis in conjunction with the Open-ended Working Group meetings | early July |
| 10. The nominating Party submits further clarification for the critical use nomination in the “unable to assess” category or if requested to do so by the Open-ended Working Group, and provides additional information should it wish to appeal against a critical use nomination recommendation by MBTOC | early August |
| 11. MBTOC meets to reassess only those critical use nominations in the “unable to assess” category, those where additional information has been submitted by the nominating Party and any critical use nominations for which additional information has been requested by the Open-ended Working Group | late August |
| 12. MBTOC final report is made available to Parties through TEAP | early October |

Please note that the annual Meeting of the Parties is typically in September or later. Therefore nominating Parties and their potential methyl bromide users may wish to submit their nomination two or more years before the critical use is needed in order to allow adequate time for national governments to complete notification of applicants, and for applicants to either procure necessary methyl bromide, if authorised, or to make appropriate arrangements to proceed without methyl bromide, if the nomination was not successful.

3.5 Recommended Forms and Procedure for Nominations and Renominations for Critical Use

PLEASE NOTE: The Technology and Economic Assessment Panel and its TOCs may be unable to assess critical use nominations that fail to comply with instructions from Parties.

3.5.1 Instructions

1. To assure timely review, please submit nominations and supporting documentation in English. Abstracts of original supporting documents in English should be given where original documents are in another language and translations are not available.
2. Forms for submission of new nominations and of renominations are given below. They are also available as individual documents **at [enter address here]**. Different forms are required for CUNs for preplant use or for structures, commodities and objects.
3. In addition to the forms, detailed information to support the nomination should be provided addressing requirements in Decision IX/6. This can be submitted as appendices to the forms.
4. A separate nomination should be submitted for each proposed critical use. Provide separate nominations where growing or storage conditions are substantially different (e.g. separate CUNs if the same product is produced in open field and protected environments). Where feasible alternatives and conditions are likely to be identical (e.g. many commodities), the nominations should be combined.
5. Incorporate, by reference, information from the prior nominations, as appropriate.
6. Wherever possible, an electronic version of the nomination in addition to a paper copy should be submitted. Where electronic copies of attachments are not available, this must be clearly advised in the nomination.

3.5.2 Naming convention for documents

Each electronic file name should follow a consistent nomenclature. It is suggested that this consists of five parts:

- Critical use nomination with the year of nomination- 7 spaces e.g. *CUN2004*
- Category - 4 spaces e.g. *Soil, Structure, Commodity, Object*
- Nominating Party abbreviation - 3 spaces e.g. *USA, BEL*
- Document series number - 2 spaces e.g. *01,02, etc*
- Description within the category of use - up to 24 spaces e.g. *Ornamentals Open field, Melons Protected, Flour Mills*

Completed Example: CUN2004 Soil USA 01 Melons Protected

3.5.3 Naming convention for citations

Limit the citations to those that are relevant to the exemption application. The following format for citations is suggested:

1. Becker J.O., Ohr H.D., Grech N.M., McGiffen M.E. and Sims J.J. 1998. Evaluations of methyl iodide as a soil fumigant in container and small field plot studies. *Pesticide Science* 52: 58-62.
2. Jacobi K.K., MacRae E.A. and Heatherington. S.E. 2001. Postharvest heat disinfestation treatments of mango fruit. *Scientia Horticulturae* 89: 171 –193.
3. Kawakami F. 1999. Current research of alternatives to methyl bromide and its reduction in Japanese Plant Quarantine. *Res. Bull. Pl. Prot. Japan* 35: 109-120.
4. Porter I.J., Mattner S.W., Brett R.W., Nicholls J.W., Rae J. and Bianco V. 2000. Plant-back, IGR and soil health influences the selection of MB alternatives in Australia. *Proc. 2000 Annual International Research Conference on Methyl Bromide Alternatives and Emissions Reductions*, Orlando, Florida. Paper 23.

3.5.4 Address for submitting nominations

All nominations should be forwarded, in both electronic and hard-copy format, to:

The Secretariat for the Vienna Convention and the Montreal Protocol
Ozone Secretariat
United Nations Environment Programme (UNEP)
P.O. Box 30552
Nairobi
Kenya

Telephone +254-2 62-1234 or 62-3850
Fax +254-2 62-3601 / 62-3913 / 62-3532
E-mail: ozoneinfo@unep.org

Electronic copies of each nomination should also be sent to the co-chairs of MBTOC. The addresses for the MBTOC co-chairs can be found on the TEAP website, at <http://www.unep.org/ozone/teap> .

Discussion draft of 4 November 04

Here follow suggested forms for new Critical Use Nominations for preplant applications, and for commodities, structures and objects, and for renominations for both categories. These forms are also available separately in [insert current location] in the MBTOC section or by fax or mail from the Ozone Secretariat.

COVER SHEETS

| |
|---|
| For Administrative Purposes only: Date received by Ozone Secretariat: YEAR: CUN: |
|---|

Form 1.

**METHYL BROMIDE CRITICAL USE NOMINATION FOR
PREPLANT SOIL USE (OPEN FIELD OR PROTECTED
ENVIRONMENT)**

NOMINATING PARTY:

BRIEF DESCRIPTIVE TITLE OF NOMINATION:

CROP NAME (OPEN FIELD OR PROTECTED):

**QUANTITY OF METHYL BROMIDE REQUESTED IN EACH YEAR OF
NOMINATION:**

**REASON OR REASONS WHY ALTERNATIVES TO METHYL BROMIDE ARE NOT
TECHNICALLY AND ECONOMICALLY FEASIBLE:**

COVER SHEETS

(Details on this page are requested under Decision Ex. I/4(7), for posting on the Ozone Secretariat website under Decision Ex. I/4(8).)

COVER SHEETS

NOMINATING PARTY CONTACT DETAILS:

Contact Person: _____
Title: _____
Address (include
city/code numbers): _____

Telephone: _____
Fax: _____
E-mail: _____

Following the requirements of Decision IX/6 paragraph (a)(1) [*insert name of Party*] has determined that the specific use detailed in this Critical Use Nomination is critical because the lack of availability of methyl bromide for this use would result in a significant market disruption.

- Yes No

Signature Name Date
Title: _____

CONTACT OR EXPERT(S) FOR FURTHER TECHNICAL DETAILS

Contact/Expert Person: _____
Title: _____
Address (include
city/code numbers): _____

COVER SHEETS

Telephone: _____

Fax: _____

E-mail: _____

LIST OF DOCUMENTS SENT TO THE OZONE SECRETARIAT IN OFFICIAL NOMINATION PACKAGE

List all paper and electronic documents submitted by the Nominating Party to the Ozone Secretariat.

| 1. PAPER DOCUMENTS: Title of paper documents and appendices | No. of pages | Date sent to Ozone Secretariat |
|--|-------------------------|---------------------------------------|
| | | |
| | | |
| | | |
| | | |
| 2. ELECTRONIC COPIES OF ALL PAPER DOCUMENTS: *Title of each electronic file (for naming convention see notes above) | No. of kilobytes | Date sent to Ozone Secretariat |
| | | |
| | | |
| | | |
| | | |

* Identical to paper documents

Part A: INTRODUCTION

- 1. NOMINATING PARTY:**

- 2. DESCRIPTIVE TITLE OF NOMINATION:**

- 3. CROP AND SUMMARY OF CROP SYSTEM** (*e.g. open field (including tunnels added after treatment), permanent glasshouses (enclosed), open ended polyhouses, others (describe)*):

- 4. METHYL BROMIDE NOMINATED** (*give quantity requested and years of nomination*):

- 5. BRIEF SUMMARY OF THE NEED FOR METHYL BROMIDE AS A CRITICAL USE** (*e.g. no registered pesticides or alternative processes for the particular circumstance, certification to meet specified disease tolerance, plantback period too long, lack of accessibility to glasshouse, unusual pests*):

- 6. SUMMARISE WHY KEY ALTERNATIVES ARE NOT FEASIBLE** (*Summary should address the two to three best alternatives as identified and evaluated by the exemption nominee, < 200 words*):

7. (i) PROPORTION OF CROP GROWN USING METHYL BROMIDE *(if particular agricultural or political regions only use MB, provide local data as well as national figures):*

| Region where MB use is requested | Total crop area in 2003 (ha) | Proportion of total crop area treated with methyl bromide in 2003 (%) |
|---|-------------------------------------|--|
| A | | |
| B | | |
| C | | |
| National Total: | | |

Add more rows if necessary

7. (ii) If only part of the crop area is treated with MB, indicate the reason why methyl bromide is not used in the other area, and identify what alternative strategies are used to control the target pathogens and weeds without methyl bromide there.

7. (iii) Would it be feasible to expand the use of these methods to cover at least part of the crop that has requested use of MB? What changes would be necessary to enable this?

8. AMOUNT OF METHYL BROMIDE REQUESTED FOR CRITICAL USE (*Duplicate table if a number of different MB formulations are being requested and/or the request is for more than one specified region*):

REGION.....

| Year of exemption request | (Insert Year) | | |
|---|----------------------|--|--|
| Kilograms of MB | | | |
| Use: broadacre or strip/bed treatment | | | |
| Formulation (ratio of MB/Pic mixture) to be used for the CUE | | | |
| Total area to be treated with the MB or MB/Pic formulation (m ² or ha) | | | |
| Application rate* (kg/ha) for the formulation | | | |
| Dosage rate* (g/m ²) of formulation used to calculate requested kg of MB | | | |

Note: For broadacre treatment application rate and dosage rate may be the same

9. SUMMARISE ASSUMPTIONS USE TO CALCULATE MB QUANTITY NOMINATED FOR EACH REGION (*include any available data on historical levels of use by the nominee*):

Part B: CROP CHARACTERISTICS AND MB USE

10. KEY DISEASES AND WEEDS FOR WHICH MB IS REQUESTED AND SPECIFIC REASON FOR THIS REQUEST IN EACH REGION (*List only those target weeds and pests for which methyl bromide is the only feasible alternative and for which CUE is being requested*):

| Region where MB use is requested | Key disease(s) and weed(s) to genus and, if known, to species level | Specific reasons why MB needed (eg. Effective herbicide available, but not registered for this crop; mandatory requirement to meet certification for disease tolerance) |
|---|--|---|
| A | | |
| B | | |
| C | | |

Add extra rows if necessary

11. (i) CHARACTERISTICS OF CROPPING SYSTEM AND CLIMATE (Place major attention on the key characteristics that affect the uptake of alternatives):

| CHARACTERISTICS | Region where MB is requested | | | |
|---|-------------------------------------|---|---|---|
| | A | B | C | D |
| Crop type, e.g. transplants, bulbs, trees or cuttings | | | | |
| Annual or perennial crop (state number of years between replanting) | | | | |
| Typical crop rotation (if any) and use of MB for other crops in the rotation (if any) | | | | |
| Soil types: (Sand loam, clay, etc.) | | | | |
| Typical dates of planting and harvest | | | | |
| Typical dates of MB fumigation | | | | |
| Frequency of MB fumigation (e.g. every two years) | | | | |
| Typical soil temperature range during MB | | | | |

| CHARACTERISTICS | Region where MB is requested | | | |
|---|------------------------------|---|---|---|
| | A | B | C | D |
| fumigation (e.g. 15-20°C) | | | | |
| Climatic zone (e.g. temperate, tropical) | | | | |
| Annual and seasonal rainfall (mm) | | | | |
| Range in average temperature variations in mid winter and mid summer (eg. min/max °C) (e.g. Jan 5-15°C, July 10-30°C) | | | | |
| Other relevant factors: | | | | |

(ii) Indicate if any of the above characteristics in 11(i) prevent the uptake of any relevant alternatives?

12. HISTORIC PATTERN OF USE OF METHYL BROMIDE, AND/OR MIXTURES CONTAINING METHYL BROMIDE, FOR WHICH AN EXEMPTION IS REQUESTED (Add separate table for each major region specified in Question 8):

| For as many years as possible as shown specify: | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|------|------|------|------|------|------|
| Area treated (hectares) | | | | | | |
| Ratio of broadacre MB use to strip/bed use if strip treatment is used | | | | | | |
| Amount of MB active ingredient used (total kg) | | | | | | |
| Formulations of MB. (e.g. MB 98:2; MB/Pic 70:30) | | | | | | |
| Method by which MB applied (e.g. injected at 25cm depth, hot gas) | | | | | | |
| Application rate of formulations in kg/ha* | | | | | | |
| Actual dosage rate of formulations (g/m ²)* | | | | | | |

*For broadacre treatment application rate and dosage rate may be the same

Part C: TECHNICAL VALIDATION

13. REASON FOR ALTERNATIVES NOT BEING FEASIBLE (*Provide detailed information on a minimum of the best two or three alternatives as identified and evaluated by the nominee, and summary response data where available for other alternatives (for assistance on potential alternatives refer to MBTOC Assessment reports, available at <http://www.unep.org/ozone/teap/MBTOC> , other published literature on MB alternatives and Ozone Secretariat alternatives when available):*

| Name of alternative | Technical and regulatory* reasons for the alternative not being feasible or available | **Citations | Is the alternative considered cost effective? |
|-------------------------------------|---|-------------|---|
| Chemical Alternatives | | | |
| | | | |
| | | | |
| | | | |
| Non chemical alternatives | | | |
| | | | |
| | | | |
| | | | |
| Combinations of alternatives | | | |
| | | | |
| | | | |
| | | | |

Add more rows if necessary

* Regulatory reasons include local restrictions (e.g. occupational health and safety, local environmental regulations) and lack of registration.

** Citations should be recorded by a number only, to indicate citations listed in Question 24.

14. LIST AND DISCUSS WHY REGISTERED (AND POTENTIAL) PESTICIDES AND HERBICIDES ARE CONSIDERED NOT EFFECTIVE AS TECHNICAL ALTERNATIVES TO MB *(Provide information on a minimum of two best alternatives as identified and evaluated by the nominee, and summary response data where available for other alternatives):*

15. LIST PRESENT (AND POSSIBLE FUTURE) REGISTRATION STATUS OF ANY CURRENT AND POTENTIAL ALTERNATIVES:

| Name of alternative | Present Registration Status State if registered for crop, registered for crop but use restricted, registered for other crops but not target crop, or not registered | Registration being considered by national authorities? | Date of possible future registration |
|---------------------|--|--|--------------------------------------|
| | | Y/N | |
| | | | |
| | | | |

Add more rows if required

16. STATE RELATIVE EFFECTIVENESS OF RELEVANT ALTERNATIVES COMPARED TO METHYL BROMIDE FOR THE SPECIFIC KEY TARGET PESTS AND WEEDS FOR WHICH IT IS BEING REQUESTED (*Use same groups as in Question 10 and provide a separate table for each target group for which MB is considered essential. Omit pathogen and/or weed tables if these are not the reason why critical use is requested. Provide information in relation to a minimum of the best two or three alternatives as identified and evaluated by the nominee*):

A: KEY PATHOGEN or KEY PATHOGEN GROUP:

| MB AND ALTERNATIVE S (include dosage rates and application method) | AVERAGE DISEASE % or RATING AND YIELDS IN PAST 3-5 YEARS | | | | |
|---|--|-----------------------|--------------|----------------------|-----------------------------------|
| | No of trials | Disease (% or rating) | No of trials | Actual yields (t/ha) | Citation number (see Question 26) |
| See example in Appendix 1 | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Add more rows if necessary

B: WEED:

| MB AND ALTERNATIVE S (include dosage rates and application method) | AVERAGE WEED NUMBER, % or RATING (or other) AND YIELDS IN PAST 3-5 YEARS | | | | |
|---|--|--|--------------|---------------|-----------------------------------|
| | No of trials | Control of target weed (No. per m ²) | No of trials | Actual yields | Citation number (see Question 26) |
| See example in Appendix 1 | | | | | |
| | | | | | |
| | | | | | |

| MB AND ALTERNATIVE S (include dosage rates and application method) | AVERAGE WEED NUMBER, % or RATING (or other) AND YIELDS IN PAST 3-5 YEARS | | | | |
|--|--|--|--------------|---------------|-----------------------------------|
| | No of trials | Control of target weed (No. per m ²) | No of trials | Actual yields | Citation number (see Question 26) |
| | | | | | |

Add more rows if necessary

17. ARE THERE ANY OTHER POTENTIAL ALTERNATIVES UNDER DEVELOPMENT WHICH ARE BEING CONSIDERED TO REPLACE METHYL BROMIDE? *(If so, please specify):*

18. ARE THERE TECHNOLOGIES BEING USED TO PRODUCE THE CROP WHICH AVOID THE NEED FOR METHYL BROMIDE? *(e.g. soilless systems, plug plants, containerized plants. State proportion of crop already grown in such systems nationally and if any constraints exist to adoption of these systems to replace MB use. State whether such technologies could replace a proportion of proposed MB use):*

Part D: EMISSION CONTROL

19. TECHNIQUES THAT HAVE AND WILL BE USED TO MINIMISE METHYL BROMIDE USE AND EMISSIONS IN THE PARTICULAR USE *(State % adoption or describe change):*

| Technique or step taken | VIF or High barrier films | MB dosage reduction | Increased % chloropicrin in MB formulation | Less frequent application |
|--|---------------------------|---------------------|--|---------------------------|
| What use/emission reduction methods are presently adopted? | | | | |
| What further use/emission reduction steps will be taken for the MB used for critical uses? | | | | |
| Other measures (please describe) | | | | |

20. IF METHYL BROMIDE EMISSION REDUCTION TECHNIQUES ARE NOT BEING USED, OR ARE NOT PLANNED FOR THE CIRCUMSTANCES OF THE NOMINATION, STATE REASONS:

Part E: ECONOMIC ASSESSMENT

Complete this section only where lack of economic feasibility of alternatives is identified as a justification for a critical use exemption.

21. ECONOMIC FEASIBILITY OF ALTERNATIVES – METHODOLOGY *(give methodology used for assessment of economic feasibility, or lack thereof):*

The following criteria may be used as a guide for providing such a description:

- (a) The purchase cost per kilogram of methyl bromide and of the alternative;
- (b) Gross and net revenue with and without methyl bromide, and with the next best alternative;
- (c) Percentage change in gross revenues if alternatives are used;

- (d) Absolute losses per hectare/cubic metre if alternatives are used;
- (e) Losses per kilogram of methyl bromide requested if alternatives are used;
- (f) Losses as a percentage of net cash revenue if alternatives are used;
- (g) Percentage change in profit margin if alternatives are used.

Part F: NATIONAL MANAGEMENT STRATEGY FOR PHASE-OUT OF THIS
NOMINATED CRITICAL USE

Provision of a National Management Strategy for Phase-out of Methyl Bromide is a requirement under Decision Ex. I/4(3) for nominations after 2005.

**22. DESCRIBE MANAGEMENT STRATEGIES THAT ARE IN PLACE OR
PROPOSED TO ELIMINATE THE USE OF METHYL BROMIDE FOR THE
NOMINATED CRITICAL USE, including :**

- (1) Measures to avoid any increase in methyl bromide consumption except for unforeseen circumstances;
- (2) Measures to encourage the use of alternatives through the use of expedited procedures, where possible, to develop, register and deploy technically and economically feasible alternatives;
- (3) Provision of information on the potential market penetration of newly deployed alternatives and alternatives which may be used in the near future, to bring forward the time when it is estimated that methyl bromide consumption for the nominated use can be reduced and/or ultimately eliminated;
- (4) Promotion of the implementation of measures which ensure that any emissions of methyl bromide are minimized;

- (5) Actions to show how the management strategy will be implemented to promote the phase-out of uses of methyl bromide as soon as technically and economically feasible alternatives are available, in particular describing the steps which the Party is taking in regard to subparagraph (b) (iii) of paragraph 1 of Decision IX/6 in respect of research programmes in non-Article 5 Parties and the adoption of alternatives by Article 5 Parties;

23. ADDITIONAL COMMENTS ON THE NOMINATION? (< 500 words):

24. CITATIONS (*allocate a number to each reference, and use this number in the text*):

Appendix. Example of format for presentation of comparative data on alternatives tested for control of a pathogen or pathogen group (and corresponding yields)

Example only

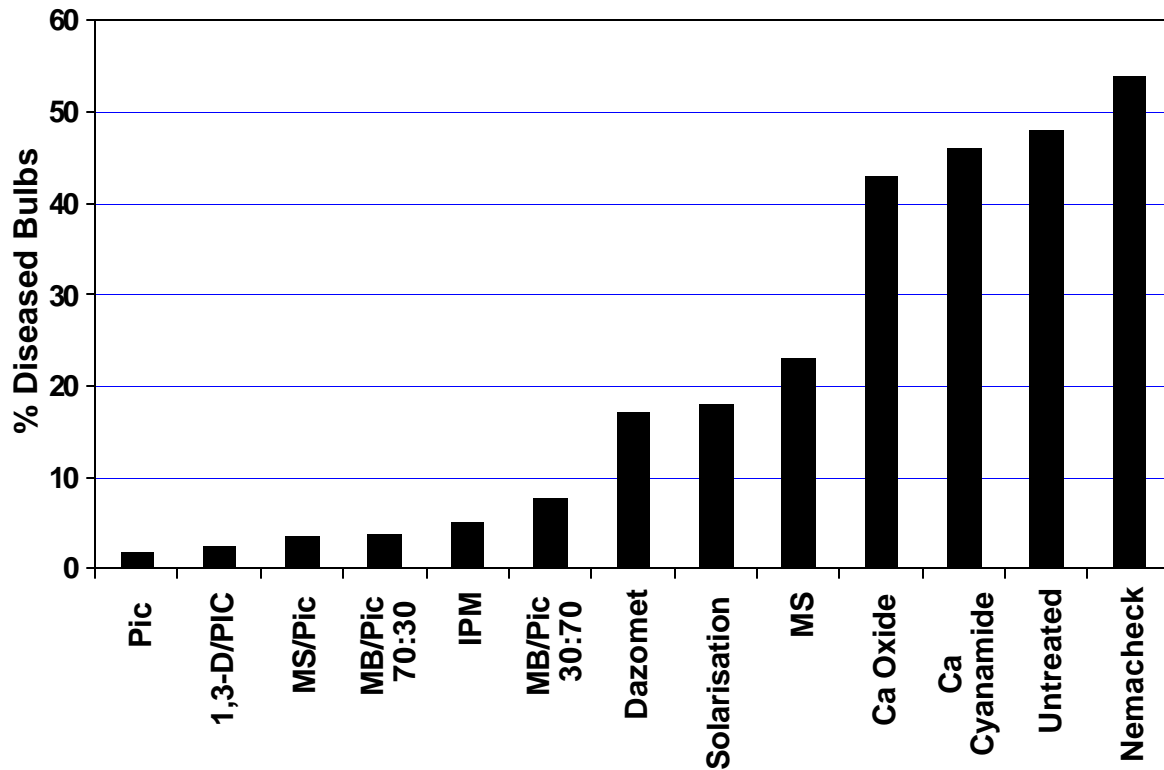
| MB FORMULATIONS* AND ALTERNATIVES (include dosage rates and application method) | AVERAGE DISEASE RATINGS AND YIELDS IN PAST 3 YEARS | | | | | | |
|---|--|--|--|--------------|----------------------|--|--------------------------------------|
| | No of trials | Pathogen No. or % Disease or Disease rating or other | Indicate significance at P=0.05 in trials compared to MB standard* | No of trials | Actual yields (t/ha) | Indicate significance at P=0.05 in trials compared to MB standard* | Citation number (see Q26) |
| *Commercial standard: MB/Pic (98:2) (60g/m ² injected at x cm depth) | 3 | 3- 4% | - | 3 | 23-25 | - | Disease: 1,7 Yields: 1,16, 25 |
| Untreated Control | 4 | 15-25% | 4 (Sig) | 4 | 18-22.0 | 3 (Sig) 1 (NS) | Diseases: 1, 7 Yield: 1,7, 16, 25 |
| MB/Pic (50:50) (32-50 g/m ² injected at x cm depth) | 5 | 2- 4% | 5 (NS) | 3 | 23-25.0 | 3 (NS) | Diseases: 1, 7 Yield: 1,16, 25 |
| 1,3D/Pic (65:35) (32-50 g/m ² via drip irrigation) | 5 | 3- 5% | 4 (NS) 1 (Sig) | 5 | 23-24.8 | 4 (NS) 1(Sig) | Diseases: 1, 7 Yield: 1,7,16, 25 |
| Solarisation (achieved 40°C for x days at depth of x cm) | 2 | 5-6% | 1 (NS, 1 (Sig) | 2 | 21-24.5 | 1 (NS) 1 (Sig) | Diseases 1 Yield 1 |

*Indicate MB/Pic formulation used in trials: 100%, 98:2, 70:30, 67:33, 50:50; other (specify)
NS = Not significant at P=0.05, Sig = Significant at P<0.05

(ii) Additional format. Note: Discuss levels of significance of the respective treatments in trials

Example only.

Relative Efficacy of Alternative Soil Disinfestation Treatments to MB for Control of *S. rolfsii* in Flower Bulbs from 1992-1999. (*Fumigants applied at 500 kg ai/ha, Ca Oxide 1t/ha, etc.*)
Pic=chloropicrin, MS=Metham sodium, etc.) (Citations 3,7 9,34, etc.)



COVER SHEETS

| |
|---|
| For Administrative Purposes only: Date received by Ozone Secretariat: YEAR: CUN: |
|---|

Form 2.

**METHYL BROMIDE CRITICAL USE NOMINATION
FOR STRUCTURES, COMMODITIES OR OBJECTS**

NOMINATING PARTY:

BRIEF DESCRIPTIVE TITLE OF NOMINATION:

STRUCTURE, COMMODITY OR OBJECT TREATED:

**QUANTITY OF METHYL BROMIDE REQUESTED IN EACH YEAR OF
NOMINATION:**

**REASON OR REASONS WHY ALTERNATIVES TO METHYL BROMIDE ARE NOT
TECHNICALLY AND ECONOMICALLY FEASIBLE:**

COVER SHEETS

Discussion draft of 4 November 04

(Details on this page are requested under Decision Ex. I/4(7), for posting on the Ozone Secretariat website under Decision Ex. I/4(8))

COVER SHEETS

Discussion draft of 4 November 04

NOMINATING PARTY CONTACT DETAILS:

Contact Person: _____
Title: _____
Address (include
city/code numbers): _____

Telephone: _____
Fax: _____
E-mail: _____

Following the requirements of Decision IX/6 paragraph (a)(1) [*insert name of Party*] has determined that the specific use detailed in this Critical Use Nomination is critical because the lack of availability of methyl bromide for this use would result in a significant market disruption.

- Yes No

Signature Name Date
Title: _____

COVER SHEETS

Discussion draft of 4 November 04

CONTACT OR EXPERT/S FOR FURTHER TECHNICAL DETAILS

Contact Person: _____
Title: _____
Address (include
city/code numbers): _____

Telephone: _____
Fax: _____
E-mail: _____

LIST OF DOCUMENTS SENT TO THE OZONE SECRETARIAT IN OFFICIAL NOMINATION PACKAGE

List all paper and electronic documents submitted by the Nominating Party to the Ozone Secretariat.

| 1. PAPER DOCUMENTS: Title of paper documents and appendices | No. of pages | Date sent to Ozone Secretariat |
|--|-------------------------|---------------------------------------|
| | | |
| | | |
| | | |
| | | |
| 2. ELECTRONIC COPIES OF ALL PAPER DOCUMENTS: *Title of each electronic file (for naming convention see notes above) | No. of kilobytes | Date sent to Ozone Secretariat |
| | | |
| | | |
| | | |

COVER SHEETS

Discussion draft of 4 November 04

| | | |
|--|--|--|
| | | |
|--|--|--|

* Identical to paper documents

Part A: INTRODUCTION

1. NOMINATING PARTY:

2. DESCRIPTIVE TITLE OF NOMINATION (< 15 words):

3. SITUATION OF NOMINATED METHYL BROMIDE USE (e.g. food processing structure, commodity (specify)):

4. METHYL BROMIDE NOMINATED (Give quantity requested and years of nomination):

5. BRIEF SUMMARY OF THE NEED FOR METHYL BROMIDE AS A CRITICAL USE (Describe the particular aspects of the nominated use that make methyl bromide use critical, e.g. lack of economic alternatives, unacceptable corrosion risk, lack of efficacy of alternatives under the particular circumstances of the nomination):

6. METHYL BROMIDE CONSUMPTION FOR PAST 5 YEARS AND AMOUNT REQUIRED IN THE YEAR(S) NOMINATED:

| | Year | Kg | Actual (A) or estimate (E) |
|-----------------------|------|----|----------------------------|
| Previous years | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Year(s) of nomination | | | |

| | | | |
|--|--|--|--|
| | | | |
| | | | |

7. LOCATION OF THE FACILITY OR FACILITIES WHERE THE PROPOSED CRITICAL USE OF METHYL BROMIDE WILL TAKE PLACE (*Give name and physical address. Continue on separate sheet(s) as annex to this form if necessary. Number each address from one onwards*):

Part B: SITUATION CHARACTERISTICS AND MB USE

8. KEY PESTS FOR WHICH METHYL BROMIDE IS REQUESTED:

| No | Genus and species for which the use of methyl bromide is critical | Common name | Indicate if <u>common</u> or <u>minor pest</u> |
|----|---|-------------|--|
| 1 | | | |
| 2 | | | |
| 3 | | | |

Add more rows if required

9. SUMMARY OF THE CIRCUMSTANCES IN WHICH THE METHYL BROMIDE IS CURRENTLY BEING USED (*Give ranges of dosage, exposure or temperatures, if appropriate*):

(a) Commodities

| No | Methyl bromide dosage (g m ⁻³) | Exposure time (hours) | Temp . (°C) | Number of fumigations per year | Proportion of product treated at this dose * | Fixed (F), mobile (M) or stack (S) |
|----|--|-----------------------|-------------|--------------------------------|--|------------------------------------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

* Advise if this information is not available.

Add more rows if required

(b) Fixed facilities

| | Type of construction and approximate age in years | Vol (m³) or range | Number of facilities e.g. 5 silos | Gastightness estimate* |
|---|--|-------------------------------------|--|-------------------------------|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |

Add more rows if required

*Give gastightness estimates where possible according to the following scale: **good** - less than 25% gas loss within 24 hours or half loss time of pressure difference (e.g. 20 to 10 Pa ($t_{1/2}$)) greater than 1 minute; **medium** – 25-50% gas loss within 24 hours or half loss time of pressure difference greater than 10 seconds; **poor** – 50-90% gas loss within 24 hours or half loss time of pressure difference 1-10 second; **very poor** – more than 90% gas loss within 24 hours or a pressure half loss time of less than 1 second.

10. LIST ALTERNATIVE TECHNIQUES THAT ARE BEING USED TO CONTROL KEY TARGET PEST SPECIES IN THIS SECTOR *(Include main alternative techniques for situations similar to the nomination such as given in MBTOC and TEAP reports indexed at <http://www.unep.org/ozone/teap/MBTOC>):*

Part C: TECHNICAL VALIDATION

11. SUMMARISE THE ALTERNATIVE(S) TESTED, STARTING WITH THE MOST PROMISING:

| No. | Methyl bromide alternative | Month/Year project started and finished (e.g. Nov 99 – Oct 04) | Premises for which the CUN is requested where alternatives have been tested [±] | Organisation(s) undertaking the research | Summary of key results (maximum of 20 words per entry) | Comparison of efficacy of alternative with methyl bromide | Citation number* |
|-----|----------------------------|--|--|--|--|---|------------------|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |

Add more rows or attach additional results as necessary.

± Place address number from Question 7 next to treatment e.g. 1-9 heat; 10 SF. This means heat was tested at address locations 1-9 and sulfuryl fluoride at location 10.

* Use numbering of citations as given in Question 17.

If necessary, any additional comments:

12. SUMMARISE TECHNICAL REASONS, IF ANY, FOR EACH ALTERNATIVE NOT BEING FEASIBLE OR AVAILABLE FOR YOUR CIRCUMSTANCES (*For economic constraints, see Question 15*):

| No. | Methyl bromide alternative (as shown in Q10) | Technical reason (if any) for the alternative not being feasible | Estimated month/year when the technical constraint <u>could</u> be solved |
|-----|--|--|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |

If necessary, add further details on why an alternative was not technically feasible:

Part D: EMISSION CONTROL

13. HOW HAS THIS SECTOR REDUCED THE USE AND EMISSIONS OF METHYL BROMIDE IN THE SITUATION OF THE NOMINATION? (*Describe procedures used to determine optimum methyl bromide dosages and exposures, improved sealing processes, monitoring systems and other activities that are in place to minimise dosage and emissions*):

Part E: ECONOMIC ASSESSMENT

Complete this section only where lack of economic feasibility of alternatives is identified as a justification for a critical use exemption.

14. ECONOMIC FEASIBILITY OF ALTERNATIVES – METHODOLOGY *(give methodology used for assessment of economic feasibility, or lack thereof):*

The following criteria may be used as a guide for providing such a description:

- (a) The purchase cost per kilogram of methyl bromide and of the alternative;
- (b) Gross and net revenue with and without methyl bromide, and with the next best alternative;
- (c) Percentage change in gross revenues if alternatives are used;
- (d) Absolute losses per cubic metre if alternatives are used;
- (e) Losses per kilogram of methyl bromide requested if alternatives are used;
- (f) Losses as a percentage of net cash revenue if alternatives are used;
- (g) Percentage change in profit margin if alternatives are used.

Part F: NATIONAL MANAGEMENT STRATEGY FOR PHASE-OUT OF THIS
NOMINATED CRITICAL USE

Provision of a National Management Strategy for Phase-out of Methyl Bromide is a requirement under Decision Ex. I/4(3) for nominations after 2005.

15. DESCRIBE MANAGEMENT STRATEGIES THAT ARE IN PLACE OR PROPOSED TO ELIMINATE THE USE OF METHYL BROMIDE FOR THE NOMINATED CRITICAL USE, including :

- (1) Measures to avoid any increase in methyl bromide consumption except for unforeseen circumstances;
- (2) Measures to encourage the use of alternatives through the use of expedited procedures, where possible, to develop, register and deploy technically and economically feasible alternatives;
- (3) Provision of information on the potential market penetration of newly deployed alternatives and alternatives which may be used in the near future, to bring forward the time when it is estimated that methyl bromide consumption for the nominated use can be reduced and/or ultimately eliminated;
- (4) Promotion of the implementation of measures which ensure that any emissions of methyl bromide are minimized;
- (5) Actions to show how the management strategy will be implemented to promote the phase-out of uses of methyl bromide as soon as technically and economically feasible alternatives are available, in particular describing the steps which the Party is taking in regard to subparagraph (b) (iii) of paragraph 1 of Decision IX/6 in respect of research programmes in non-Article 5 Parties and the adoption of alternatives by Article 5 Parties.

16. ADDITIONAL COMMENTS (*Add here any other information that may help clarify why a critical use is needed for the use being considered*):

17. CITATIONS (*Number each citation*):

COVER SHEETS

| |
|---|
| For Administrative Purposes only: Date received by Ozone Secretariat: YEAR: CUN: |
|---|

Form 3.

**RENOMINATION OF METHYL BROMIDE CRITICAL USE
FOR PREPLANT SOIL USE AND STRUCTURES, COMMODITIES
OR OBJECTS**

NOMINATING PARTY:

BRIEF DESCRIPTIVE TITLE OF NOMINATION:

STRUCTURE, COMMODITY OR OBJECT TREATED:

QUANTITY OF METHYL BROMIDE REQUESTED IN EACH YEAR OF NOMINATION:

**SUMMARY OF ANY SIGNIFICANT CHANGES SINCE SUBMISSION OF PREVIOUS
NOMINATIONS:**

(Details on this page are similar to those for new nominations requested under Decision Ex. I/4(7), for posting on the Ozone Secretariat website under Decision Ex. I/4(8))

COVER SHEETS

This form is to be used by holders of single-year exemptions to reapply for a subsequent year's exemption (for example, nominees approved for single-year exemptions for 2005 and/or 2006 seeking further exemptions for 2007). It does not replace the format for requesting a critical-use exemption for the first time.

In assessing nominations submitted in this format, TEAP and MBTOC will also refer to the original nomination on which the nominee's first-year exemption was approved, as well as any supplementary information provided by the nominee in relation to that original nomination. As this earlier information is retained by MBTOC, nominees need not re-submit that earlier information.

COVER SHEETS

NOMINATING PARTY CONTACT DETAILS:

Contact Person: _____
Title: _____
Address (include
city/code numbers): _____

Telephone: _____
Fax: _____
E-mail: _____

Following the requirements of Decision IX/6 paragraph (a)(1) [*insert name of Party*] has determined that the specific use detailed in this Critical Use Nomination is critical because the lack of availability of methyl bromide for this use would result in a significant market disruption.

Yes No

Signature Name Date
Title: _____

CONTACT OR EXPERT(S) FOR FURTHER TECHNICAL DETAILS

Contact/Expert Person: _____
Title: _____
Address (include
city/code numbers): _____

Telephone: _____

COVER SHEETS

Fax: _____

E-mail: _____

LIST OF DOCUMENTS SENT TO THE OZONE SECRETARIAT IN OFFICIAL NOMINATION PACKAGE

List all paper and electronic documents submitted by the Nominating Party to the Ozone Secretariat.

| 1. PAPER DOCUMENTS: Title of paper documents and appendices | No. of pages | Date sent to Ozone Secretariat |
|--|-------------------------|---------------------------------------|
| | | |
| | | |
| | | |
| | | |
| 2. ELECTRONIC COPIES OF ALL PAPER DOCUMENTS:) | No. of kilobytes | Date sent to Ozone Secretariat |
| | | |
| | | |
| | | |

Part A: SUMMARY INFORMATION

- 1. NOMINATING PARTY:**

- 2. BRIEF DESCRIPTIVE TITLE OF NOMINATION:**

- 3. YEAR FOR WHICH EXEMPTION SOUGHT:**

- 4. SUMMARY OF ANY SIGNIFICANT CHANGES SINCE SUBMISSION OF PREVIOUS NOMINATIONS** (*e.g. changes to requested exemption quantities, successful trialling or commercialisation of alternatives, etc.*)

Part B: TRANSITION PLANS

. Provision of a National Management Strategy for Phase-out of Methyl Bromide is a requirement under Decision Ex. I/4(3) for nominations after 2005. Where the original nomination did not incorporate a National Management Strategy for this nominated use, the information should now be provided in Question 5.

5. IF NOT ALREADY PROVIDED, DESCRIBE MANAGEMENT STRATEGIES THAT ARE IN PLACE OR PROPOSED TO ELIMINATE THE USE OF METHYL BROMIDE FOR THE NOMINATED CRITICAL USE, INCLUDING :

- (1) Measures to avoid any increase in methyl bromide consumption except for unforeseen circumstances;
- (2) Measures to encourage the use of alternatives through the use of expedited procedures, where possible, to develop, register and deploy technically and economically feasible alternatives;
- (3) Provision of information on the potential market penetration of newly deployed alternatives and alternatives which may be used in the near future, to bring forward the time when it is estimated that methyl bromide consumption for the nominated use can be reduced and/or ultimately eliminated;
- (4) Promotion of the implementation of measures which ensure that any emissions of methyl bromide are minimized;
- (5) Actions to show how the management strategy will be implemented to promote the phase-out of uses of methyl bromide as soon as technically and economically feasible alternatives are available, in particular describing the steps which the Party is taking in regard to subparagraph (b) (iii) of paragraph 1 of Decision IX/6 in respect of research programmes in non- Article 5 Parties and the adoption of alternatives by Article 5 Parties.

Part C: TRANSITION ACTIONS

Responses should be consistent with information set out in the applicant's previously-approved nominations regarding their transition plans, and provide an update of progress in the implementation of those plans.

In developing recommendations on exemption nominations submitted in 2003 and 2004, the Technology and Economic Assessment Panel in some cases recommended that nominees should explore the use of particular alternatives not identified in a nominations' transition plans. Where the nominee has subsequently taken steps to explore use of those alternatives, information should also be provided in this section on those steps taken.

Questions 5 - 9 should be completed where applicable to the nomination. Where a question is not applicable to the nomination, write "N/A".

6. TRIALS OF ALTERNATIVES

Where available, attach copies of trial reports.

i. Description and implementation status:

ii. Outcomes of trials:

Include any available data on outcomes from trials that are still underway. Where applicable, complete the table included at Appendix I identifying comparative disease ratings and yields with the use of methyl bromide formulations and alternatives.

iii. Impact on critical use nomination/required quantities:

(For example, provide advice on any reductions to the required quantity resulting from successful results of trials.)

iv. Actions to address any delays/obstacles in conducting or finalising trials:

7. TECHNOLOGY TRANSFER, SCALE-UP, REGULATORY APPROVAL FOR ALTERNATIVES

i. Description and implementation status:

ii. Outcomes achieved to date from technology transfer, scale-up, regulatory approval:

iii. Impact on critical use nomination/required quantities:

(For example, provide advice on any reductions to the required quantity resulting from successful progress in technology transfer, scale-up, and/or regulatory approval.)

iv. Actions to address any delays/obstacles:

8. COMMERCIAL SCALE-UP/DEPLOYMENT, MARKET PENETRATION OF ALTERNATIVES

i. Description and implementation status:

ii. Impact on critical use nomination/required quantities:

(For example, provide advice on any reductions to the required quantity resulting from successful commercial scale-up/deployment and/or market penetration.)

iii. Actions to address any delays/obstacles:

9. ANY CHANGES TO TRANSITION PROGRAM

If the transition program outlined in the nominee's original nomination has been changed, provide information on the nature of those changes and the reasons for them. Where the changes are significant, attach a full description of the revised transition program.

10. ANY OTHER BROADER TRANSITION ACTIVITIES

Provide information in this section on any other transitional activities that are not addressed by sections 2.1-2.4. This section provides a nominating Party with the opportunity to report,

where applicable, on any additional activities which it may have undertaken to encourage a transition, but need not be restricted to the circumstances and activities of the individual nomination. Without prescribing specific activities that a nominating Party should address, and noting that individual Parties are best placed to identify the most appropriate approach to achieve a swift transition in their own circumstances, such activities could include market incentives, financial support to exemption nominees and exemption holders, labelling, product prohibitions, public awareness and information campaigns, etc.

Part D: REGISTRATION OF ALTERNATIVES

Progress in registration of a product will often be beyond the control of an individual exemption holder as the registration process may be undertaken by the manufacturer or supplier of the product. The speed with which registration applications are processed also can fall outside the exemption holder's control, resting with the nominating Party. Consequently, this section requests the nominating Party to report on any efforts it has taken to assist the registration process, but noting that the scope for expediting registration will vary from Party to Party.

11. PROGRESS IN REGISTRATION

Where the original nomination identified that an alternative's registration was pending, but it was anticipated that one would be subsequently registered, provide information on progress with its registration. Where applicable, include any efforts by the Party to "fast track" or otherwise assist the registration of the alternative.

12. DELAYS IN REGISTRATION

Where significant delays or obstacles have been encountered to the anticipated registration of an alternative, the exemption holder should identify the scope for any new/alternative efforts that could be undertaken to maintain the momentum of transition efforts, and identify a time frame for undertaking such efforts.

13. DEREGISTRATION OF ALTERNATIVES

Where a potential alternative identified in the original nomination's transition plan has subsequently been deregistered, the nominating Party will report the deregistration, including reasons for it. The nominating Party would also report on the de-registration's impact (if any) on the exemption holder's transition plan and on the proposed new or alternative efforts that will be undertaken by the exemption holder to maintain the momentum of transition efforts.

| |
|---|
| Part E: IMPLEMENTATION OF MBTOC/TEAP RECOMMENDATIONS |
|---|

In developing recommendations on exemption nominations, the Methyl Bromide Technical Options Committee and the Technology and Economic Assessment Panel may recommend that nominees should explore and, where appropriate, implement alternative systems for deployment of alternatives or reduction of methyl bromide emissions:

Where the approval granted by the Meeting of the Parties for exemptions included conditions incorporating those recommendations (for example, where the Parties approved a reduced quantity for a nomination), the exemption holder should report on progress in exploring or implementing them.

Information on any trialling or other exploration of particular alternatives identified in TEAP recommendations should be addressed in Part C.

14. USE/EMISSION MINIMISATION MEASURES

Where a condition required the testing of an alternative or adoption of an emission or use minimisation measure, information is required on the status of efforts to implement the recommendation. Information should also be provided on any resultant decrease in the exemption quantity arising if the recommendations have been successfully implemented. Where any delays or obstacles have arisen preventing implementation, information is required on what actions are being, or will be, undertaken to address them.

Part F: ECONOMIC FEASIBILITY

Where a nomination has been approved on the basis of the economic infeasibility of an alternative, provide information where applicable on any significant changes to the underlying economic factors. Depending on the factors identified in the original nomination regarding the economic feasibility of alternatives, the information to be provided in this section could include details on (for example):

- (a) The purchase cost per kilogram of methyl bromide and of the alternative;
- (b) Gross and net revenue with and without methyl bromide, and with the next best alternative;
- (c) Percentage change in gross revenues if alternatives are used;
- (d) Absolute losses per hectare/cubic metre if alternatives are used;
- (e) Losses per kilogram of methyl bromide requested if alternatives are used;
- (f) Losses as a percentage of net cash revenue if alternatives are used;
- (g) Percentage change in profit margin if alternatives are used.

Part G: CHANGES TO QUANTITY OF METHYL BROMIDE REQUESTED

This section seeks information on any changes to the nominee's requested exemption quantity.

15. CHANGES IN USAGE REQUIREMENTS

Provide information on the nature of the changed requirement, including whether it has arisen from changes in dosage rates, the number of hectares or cubic metres to which the methyl bromide is to be applied, and/or any other relevant factors causing the changes.

16. RESULTANT CHANGES TO REQUESTED EXEMPTION QUANTITIES

Quantity requested for previous nomination year: _____

Quantity recommended for previous nomination year
by Methyl Bromide Technical Options Committee/
Technology and Economic Assessment Panel: _____

Quantity approved by Parties for previous nomination year: _____

Discussion draft of 4 November 04

Quantity required for year to which this reapplication refers: _____

Appendix I: Format for presentation of comparative data on alternatives tested for control of a pathogen or pathogen group (and corresponding yields)

Example of completed format

| MB FORMULATIONS* AND ALTERNATIVES (include dosage rates and application method) | AVERAGE DISEASE RATINGS AND YIELDS IN PAST 3 YEARS | | | | | | |
|---|--|--|--|--------------|----------------------|--|--------------------------------------|
| | No of trials | Pathogen No. or % Disease or Disease rating or other | Indicate significance at P=0.05 in trials compared to MB standard* | No of trials | Actual yields (t/ha) | Indicate significance at P=0.05 in trials compared to MB standard* | Citation number |
| *Commercial standard: MB/Pic (98:2) (60g/m ² injected at x cm depth) | 3 | 3- 4% | - | 3 | 23-25 | - | Disease: 1,7 Yields: 1,16, 25 |
| Untreated Control | 4 | 15-25% | 4 (Sig) | 4 | 18-22.0 | 3 (Sig) 1 (NS) | Diseases: 1, 7 Yield: 1,7, 16, 25 |
| MB/Pic (50:50) (32-50 g/m ² injected at x cm depth) | 5 | 2- 4% | 5 (NS) | 3 | 23-25.0 | 3 (NS) | Diseases: 1, 7 Yield: 1,16, 25 |
| 1,3D/Pic (65:35) (32-50 g/m ² via drip irrigation) | 5 | 3- 5% | 4 (NS) 1 (Sig) | 5 | 23-24.8 | 4 (NS) 1(Sig) | Diseases: 1, 7 Yield: 1,7,16, 25 |
| Solarisation (achieved 40°C for x days at depth of x cm) | 2 | 5-6% | 1 (NS, 1 (Sig) | 2 | 21-24.5 | 1 (NS) 1 (Sig) | Diseases 1 Yield 1 |

*Indicate MB/Pic formulation used in trials: 100%, 98:2, 70:30, 67:33, 50:50; other (specify)
NS = Not significant at P=0.05, Sig = Significant at P<0.05

Appendix A – Excerpts from Protocol Provisions¹

ARTICLE 2: CONTROL MEASURES

Article 2H: Methyl Bromide

1. Each Party shall ensure that for the twelve-month period commencing on 1 January 1995, and in each twelve-month period thereafter, its calculated level of consumption of the controlled substance in Annex E does not exceed, annually, its calculated level of consumption in 1991. Each Party producing the substance shall, for the same period, ensure that its calculated level of production of the substance does not exceed, annually, its calculated level of production in 1991. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of its calculated level of production in 1991.
2. Each Party shall ensure that for the twelve-month period commencing on 1 January 1999, and in the twelve-month period thereafter, its calculated level of consumption of the controlled substance in Annex E does not exceed, annually, seventy-five per cent of its calculated level of consumption in 1991. Each Party producing the substance shall, for the same periods, ensure that its calculated level of production of the substance does not exceed, annually, seventy-five per cent of its calculated level of production in 1991. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of its calculated level of production in 1991.
3. Each Party shall ensure that for the twelve-month period commencing on 1 January 2001, and in the twelve-month period thereafter, its calculated level of consumption of the controlled substance in Annex E does not exceed, annually, fifty per cent of its calculated level of consumption in 1991. Each Party producing the substance shall, for the same periods, ensure that its calculated level of production of the substance does not exceed,

¹ For a consolidated description of Protocol provisions see "Handbook for the International Treaties for the Protection of the Ozone Layer", Sixth Edition, 2003, Ozone Secretariat.

annually, fifty per cent of its calculated level of production in 1991. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of its calculated level of production in 1991.

4. Each Party shall ensure that for the twelve-month period commencing on 1 January 2003, and in the twelve-month period thereafter, its calculated level of consumption of the controlled substance in Annex E does not exceed, annually, thirty per cent of its calculated level of consumption in 1991. Each Party producing the substance shall, for the same periods, ensure that its calculated level of production of the substance does not exceed, annually, thirty per cent of its calculated level of production in 1991. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to ten per cent of its calculated level of production in 1991.
5. Each Party shall ensure that for the twelve-month period commencing on 1 January 2005, and in each twelve-month period thereafter, its calculated level of consumption of the controlled substance in Annex E does not exceed zero. Each Party producing the substance shall, for the same periods, ensure that its calculated level of production of the substance does not exceed zero. However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may exceed that limit by up to fifteen per cent of its calculated level of production in 1991. This paragraph will apply save to the extent that the Parties decide to permit the level of production or consumption that is necessary to satisfy uses agreed by them to be critical uses.
- 5 bis.* Each Party shall ensure that for the twelve-month period commencing on 1 January 2005, and in each twelve-month period thereafter, its calculated level of production of the controlled substance in Annex E for the basic domestic needs of the Parties operating under paragraph 1 of Article 5 does not exceed eighty percent of the annual average of its production of the substance for basic domestic needs for the period 1995 to 1998 inclusive.
- 5 ter.* Each Party shall ensure that for the twelve-month period commencing on 1 January 2015, and in each twelve-month period thereafter, its calculated level of production of the

controlled substance in Annex E for the basic domestic needs of the Parties operating under paragraph 1 of Article 5 does not exceed zero.

6. The calculated levels of production and consumption under this Article shall not include the amounts used by the Party for quarantine and pre-shipment applications.

Adjustments² relating to the controlled substance in Annex E (Annex IV of the 11th Meeting of the Parties, Beijing)

Article 2H: Methyl bromide

1. The third sentence of paragraph 5 of Article 2H of the Protocol shall be replaced by the following sentence:

However, in order to satisfy the basic domestic needs of the Parties operating under paragraph 1 of Article 5, its calculated level of production may, until 1 January 2002 exceed that limit by up to fifteen per cent of its calculated level of production in 1991; thereafter, it may exceed that limit by a quantity equal to the annual average of its production of the controlled substance in Annex E for basic domestic needs for the period 1995 to 1998 inclusive.

2. The following paragraphs shall be added after paragraph 5 of Article 2H of the Protocol:

5 bis. Each Party shall ensure that for the twelve-month period commencing on 1 January 2005 and in each twelve-month period thereafter, its calculated level of production of the controlled substance in Annex E for the basic domestic needs of the Parties operating under paragraph 1 of Article 5 does not exceed eighty per cent of the annual average of its production of the substance for basic domestic needs for the period 1995 to 1998 inclusive.

5 ter. Each Party shall ensure that for the twelve-month period commencing on 1 January 2015 and in each twelve-month period thereafter, its calculated level of production of the controlled substance in Annex E for the basic domestic needs of the Parties operating under paragraph 1 of Article 5 does not exceed zero.

² Decision XII/1 addresses a correction to this adjustment.

Article 6: Assessment and Review of Control Measures

Beginning in 1990, and at least every four years thereafter, the Parties shall assess the control measures provided for in Article 2 and Articles 2A to 2E, and the situation regarding production, imports and exports of the transitional substances in Group I of Annex C (Articles 2A to 2H) on the basis of available scientific, environmental, technical and economic information. At least one year before each assessment, the Parties shall convene appropriate panels of experts qualified in the fields mentioned and determine the composition and terms of reference of any such panels. Within one year of being convened, the panels will report their conclusions, through the Secretariat, to the Parties.

Appendix B – Extracts from Meeting Reports and Decisions of the Parties to the Montreal Protocol Relevant to Critical Uses of Methyl Bromide³

1. Extract from: The Report of the Thirteenth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer

“VI. OTHER MATTERS

A. Nominations for critical-use exemptions for applications of methyl bromide

110. The representative of Australia introduced a conference room paper containing a draft decision on critical-use submissions for methyl bromide applications, representing the outcome of discussions by a contact group of Parties. She explained that the decision arose out of concerns previously expressed by the Technology and Economic Assessment Panel about the timing and content of critical-use submissions following the adoption of decision IX/6 at the Ninth Meeting of the Parties. Parties feared that in the absence of near-term guidance, different countries could submit different information, leading to difficulties in ensuring a fair and equitable review of exemption requests, and agreed that it would be desirable to establish a schedule for submission mirroring that already in place for essential-use exemptions.

111. The group had accepted the suggestion of the Methyl Bromide Technical Options Committee that essential components of a critical-use exemption request should include the following: name of crop/use for which the exemption was being requested; location of the use; basic information on related soil type and climate associated with areas where the exemption was being requested (if relevant); the pests or problems which methyl bromide was being used to control; historic use of methyl bromide in total kilograms, kilograms/hectare (or acre) and total hectares (or acres) covered; kilograms of methyl bromide requested in the exemption and the duration of the exemption requested; techniques used to minimize emissions (e.g. tarpaulins or methyl bromide injection techniques); cost of methyl bromide per hectare (or acre) and cost of alternatives tried; cost of application of methyl bromide and alternatives; cost of fixed and variable inputs; gross and net revenue; price received by the user and in major markets; and historic yield information with methyl bromide and alternatives (if available). The Technology and Economic Assessment Panel should make adjustments to the list to cover non-soil uses.

112. In addition, the provision of information demonstrating that appropriate efforts were being made to evaluate, commercialize and secure regulatory approval of alternatives and substitutes was required under decision IX/6. In that regard, the fullest information available should be provided on trials with alternatives and their results. Regarding alternatives, Parties should seek to ensure that users had tried the alternatives listed in past TEAP reports as available, or included an explanation showing that alternative was not feasible in the given situation, or what plans the applicant had to test or put in place the alternative. In any event, under decision IX/6 Parties must present a plan to test and switch to alternatives in the near term. Also under decision IX/6, Parties must provide information indicating that methyl bromide was not available from banked or recycled supplies.

113. The group had also felt that it would be useful for Parties submitting applications to consider possible ways to consolidate national applications in order to make review by the Technology and Economic Assessment Panel and the Parties more manageable. The group agreed that it would be useful for the Panel to make available, as soon as possible, a methyl bromide critical uses handbook, including the key application information requirements outlined above, and a consolidated list of alternatives that had been included in past reports of the Panel and the Methyl Bromide Technical Options Committee. The group also agreed that as issues relating to application of the economic criteria contained in decision IX/6 were likely to be difficult for the Committee to review, it would be useful to ask the Panel and the Committee to consider how to add agricultural economists to the membership of the Committee to assist it in the review of critical-use nominations.

114. Following a discussion, the preparatory segment decided to forward the draft decision, as amended, to the high-level segment for approval.”

2. Decisions on critical uses of methyl bromide.

Decision IX/6: Critical-use exemptions for methyl bromide

1. To apply the following criteria and procedure in assessing a critical methyl bromide use for the purposes of control measures in Article 2 of the Protocol:
 - (a) That a use of methyl bromide should qualify as "critical" only if the nominating Party determines that:
 - (i) The specific use is critical because the lack of availability of methyl bromide for that use would result in a significant market disruption; and

- (ii) There are no technically and economically feasible alternatives or substitutes available to the user that are acceptable from the standpoint of environment and health and are suitable to the crops and circumstances of the nomination;
 - (b) That production and consumption, if any, of methyl bromide for critical uses should be permitted only if:
 - (i) All technically and economically feasible steps have been taken to minimize the critical use and any associated emission of methyl bromide;
 - (ii) Methyl bromide is not available in sufficient quantity and quality from existing stocks of banked or recycled methyl bromide, also bearing in mind the developing countries' need for methyl bromide;
 - (iii) It is demonstrated that an appropriate effort is being made to evaluate, commercialize and secure national regulatory approval of alternatives and substitutes, taking into consideration the circumstances of the particular nomination and the special needs of Article 5 Parties, including lack of financial and expert resources, institutional capacity, and information. Non-Article 5 Parties must demonstrate that research programmes are in place to develop and deploy alternatives and substitutes. Article 5 Parties must demonstrate that feasible alternatives shall be adopted as soon as they are confirmed as suitable to the Party's specific conditions and/or that they have applied to the Multilateral Fund or other sources for assistance in identifying, evaluating, adapting and demonstrating such options;
2. To request the Technology and Economic Assessment Panel to review nominations and make recommendations based on the criteria established in paragraphs 1 (a) (ii) and 1 (b) of the present decision;
 3. That the present decision will apply to Parties operating under Article 5 and Parties not so operating only after the phase-out date applicable to those Parties;

Decision IX/7: Emergency methyl-bromide use

To allow a Party, upon notification to the Secretariat, to use, in response to an emergency event, consumption of quantities not exceeding 20 tonnes of methyl bromide. The Secretariat and the Technology and Economic Assessment Panel will evaluate the use according to the "critical methyl bromide use" criteria and present this information to the next meeting of the Parties for review and appropriate guidance on future such emergencies, including whether or not the figure of 20 tonnes is appropriate.

Decision XIII/11: Procedures for applying for a critical use exemption for methyl-bromide.

Noting that Parties not operating under paragraph 1 of Article 5 must cease production and consumption of methyl bromide for other than quarantine and pre-shipment applications from 1 January 2005, except for consumption and production that meet the levels agreed by the Parties for critical uses,

Noting the importance of providing the Parties not operating under paragraph 1 of Article 5 with early guidance on arrangements for implementing decision IX/6, which provides criteria and procedures for assessing a critical methyl bromide use,

Noting the need for the Parties to have adequate guidance to enable them to submit nominations for critical-use exemptions for consideration at the 15th Meeting of the Parties in 2003,

1. To note with appreciation the work of the Methyl Bromide Technical Options Committee (MBTOC) in presenting the information required in order adequately to assess nominations submitted in pursuance of decision IX/6 for critical-use exemptions and the ongoing work of the Technology and Economic Assessment Panel in preparing a consolidated list of alternatives to methyl bromide that had been included in past Technical and Economic Assessment Panel and MBTOC reports;
2. To request the Technology and Economic Assessment Panel to prepare a handbook on critical-use nomination procedures which provides this information, and the schedule for submission which reflects that currently employed in the essential-use nomination procedure;
3. To request the Technology and Economic Assessment Panel to finalize the consolidated list of alternatives to methyl bromide referred to in paragraph 1 and post it on its Website as soon as possible;

4. To request the Technology and Economic Assessment Panel to finalise the “Handbook on Critical Use Nominations for Methyl Bromide” by January 2002, and the Secretariat to post this Handbook on its Website as soon as possible;
5. To request the Technology and Economic Assessment Panel to engage suitably qualified agricultural economists to assist it in reviewing critical-use nominations.

Decision XV/54. Categories of assessment to be used by the Technology and Economic Assessment Panel when assessing critical uses of methyl bromide

Recognizing that Parties had difficulty in taking a decision on the appropriate amount of methyl bromide to use for critical uses,

Mindful that exemptions must comply fully with decision IX/6 and are intended to be limited, temporary derogations from the phase-out of methyl bromide,

1. To invite Parties with nominations that are currently categorized as “noted” in the Technology and Economic Assessment Panel 2003 supplementary report to submit additional information in support of their nominations, using the comments by the Technology and Economic Assessment Panel/Methyl Bromide Technical Options Committee in the October 2003 supplementary report as a guide to the additional information required. The Methyl Bromide Technical Options Committee co-chairs will provide additional guidance to assist Parties concerning the information required if so requested. Parties are requested to submit additional information to the Ozone Secretariat by 31 January 2004;

2. To request the Methyl Bromide Technical Options Committee to convene a special meeting, which should be held in sufficient time to allow a report by the Technology and Economic Assessment Panel to be released to the Parties no later than 14 February 2004;

3. To request the Technology and Economic Assessment Panel to evaluate the critical-use nominations for methyl bromide that are currently categorized as “noted” and recategorize them as “recommended”, “not recommended” or “unable to assess”.

Decision Ex.I/3. Critical-use exemptions for methyl bromide for 2005

Reaffirming the obligation to phase out the production and consumption of methyl bromide in accordance with paragraph 5 of Article 2H by 1 January 2005, subject to the availability of an exemption for uses agreed to be critical by the Parties,

Recognizing that technically and economically feasible alternatives exist for most uses of methyl bromide,

Noting that those alternatives are not always technically and economically feasible in the circumstances of the nominations,

Noting also that Article 5 Parties have made substantial progress in the adoption of effective alternatives,

Mindful that exemptions must fully comply with decision IX/6, and are intended to be limited, temporary derogations from the phase-out of methyl bromide,

Mindful also that decision IX/6 permits the production and consumption of methyl bromide for critical uses only if it is not available in sufficient quantity and quality from existing stocks of banked or recycled methyl bromide,

Recognizing the desirability of a transparent presentation of data on alternatives to methyl bromide to assist the Parties to better understand the critical-use volumes and to gauge progress on and impediments to the transition,

Recognizing also that each Party should aim to significantly and progressively decrease its production and consumption of methyl bromide for critical uses with the intention of completely phasing out methyl bromide as soon as technically and economically feasible alternatives are available,

Resolved that each Party should revert to methyl bromide only as a last resort and in the situation when a technically and economically feasible alternative to methyl bromide which is in use ceases to be available as a result of de-registration or for other reasons,

Taking into account the recommendation by the Technology and Economic Assessment Panel (TEAP) that critical-use exemptions should not be authorized in cases where technically and economically feasible options are registered, available locally and used commercially by similarly situated enterprises,

Noting with appreciation the work done by TEAP and its Methyl Bromide Technical Options Committee (MBTOC),

1. For the agreed critical uses set forth in annex II A to the present report for each Party, to permit, subject to the conditions set forth in decision Ex.I/4, the levels of production and consumption set forth in annex II B to the present report which are necessary to satisfy critical uses, with the understanding that additional levels and categories of uses may be approved by the Sixteenth Meeting of the Parties in accordance with decision IX/6;
2. That a Party with a critical-use exemption level in excess of permitted levels of production and consumption for critical uses is to make up any such difference between those levels by utilizing quantities of methyl bromide from stocks that the Party has recognized to be available;
3. That a Party utilizing stocks under paragraph 2 above shall prohibit the use of stocks in the categories set forth in annex II A to the present report when amounts from stocks combined

- with allowable production and consumption for critical uses exceed the total level for that Party set forth in annex II A to the present report;
4. That Parties should endeavour to allocate the quantities of methyl bromide recommended by TEAP as listed in annex II A to the present report;
 5. That each Party which has an agreed critical use should ensure that the criteria in paragraph 1 of decision IX/6 are applied when licensing, permitting or authorizing the use of methyl bromide and that such procedures take into account available stocks. Each Party is requested to report on the implementation of the present paragraph to the Ozone Secretariat;
 6. To take note of the proposal by the United States of America on multi-year exemptions, as reflected in paragraph 7 of the paper reproduced in annex III to the present report, and to consider, at the Sixteenth Meeting of the Parties, the elaboration of criteria and a methodology for authorizing multi-year exemptions;
 7. Bearing in mind that Parties should aim to significantly and progressively reduce their production and consumption of methyl bromide for critical-use exemptions, a Party may request reconsideration by the Meeting of the Parties of an approved critical-use exemption in the case of exceptional circumstances, such as unforeseen de-registration of an approved methyl bromide alternative when no other feasible alternatives are available, or where pest and pathogens build resistance to the alternative, or where the use-reduction measures on which TEAP based its recommendation as to the level necessary to satisfy critical uses are demonstrated not to be feasible in the specific circumstances of that Party.

Decision Ex.I/4. Conditions for granting and reporting critical-use exemptions for methyl bromide

Mindful of the principles set forth in the report⁴ by the Chairman of the informal consultation on methyl bromide held in Buenos Aires on 4 and 5 March 2004, namely, fairness, certainty and confidence, practicality and flexibility, and transparency,

Recognizing that technically and economically feasible alternatives exist for most uses of methyl bromide,

Noting that those alternatives are not always technically and economically feasible in the circumstances of nominations,

Noting that Article 5 and non-Article 5 Parties have made substantial progress in the adoption of effective alternatives,

Mindful that exemptions must comply fully with decision IX/6 and are intended to be limited, temporary derogations from the phase-out of methyl bromide,

Recognizing the desirability of a transparent presentation of data on alternatives to methyl bromide to assist the Parties to better understand the critical-use volumes and to gauge progress on

⁴ UNEP/OzL.Pro.ExMP/1/INF/1, para. 11.

and impediments to the transition from methyl bromide;

Resolved that each Party should aim to significantly and progressively decrease its production and consumption of methyl bromide for critical uses with the intention of completely phasing out methyl bromide as soon as technically and economically feasible alternatives are available,

Recognizing that Parties should revert to methyl bromide only as a last resort, in the event that a technically and economically feasible alternative to methyl bromide which is in use ceases to be available as a result of de-registration or for other reasons,

4. That each Party which has an agreed critical use under the present decision should submit available information to the Ozone Secretariat before 1 February 2005 on the alternatives available, listed according to their pre-harvest or post-harvest uses and the possible date of registration, if required, for each alternative; and on the alternatives which the Parties can disclose to be under development, listed according to their pre-harvest or post-harvest uses and the likely date of registration, if required and known, for those alternatives. The Ozone Secretariat is requested to provide a template for that information and to post the said information in a database entitled "Methyl Bromide Alternatives" on its web site;

5. That each Party which submits a nomination for the production and consumption of methyl bromide for years after 2005 should also submit information listed in paragraph 1 to the Ozone Secretariat to include in its Methyl Bromide Alternatives database and that any other Party which no longer consumes methyl bromide should also submit information on alternatives to the Secretariat for inclusion in that database;

6. To request each Party which makes a critical-use nomination after 2005 to submit a national management strategy for phase-out of critical uses of methyl bromide to the Ozone Secretariat before 1 February 2006. The management strategy should aim, inter alia, to:

(a) Avoid any increase in methyl bromide consumption except for unforeseen circumstances;

(b) Encourage the use of alternatives through the use of expedited procedures, where possible, to develop, register and deploy technically and economically feasible alternatives;

(c) Provide information, for each current pre-harvest and post-harvest use for which a nomination is planned, on the potential market penetration of newly deployed alternatives, and alternatives which may be used in the near future, to bring forward the time when it is estimated that methyl bromide consumption for such uses can be reduced and/or ultimately eliminated;

(d) Promote the implementation of measures which ensure that any emissions of methyl bromide are minimized;

(e) Show how the management strategy will be implemented to

promote the phase-out of uses of methyl bromide as soon as technically and economically feasible alternatives are available, in particular describing the steps which the Party is taking in regard to subparagraph (b) (iii) of paragraph 1 of decision IX/6 in respect of research programmes in non-Article 5 Parties and the adoption of alternatives by Article 5 Parties;

7. To request the Meeting of the Parties to take into account information submitted pursuant to paragraphs 1 and 3 of the present decision when it considers permitting a Party to produce or consume methyl bromide for critical uses after 2006;

8. To request a Party that has submitted a request for a critical use exemption to consider and implement, if feasible, Technology and Economic Assessment Panel and Methyl Bromide Technical Options Committee recommendations on actions which a Party may take to reduce critical uses of methyl bromide;

9. To request any Party submitting a critical-use nomination after 2004 to describe in its nomination the methodology used to determine economic feasibility in the event that economic feasibility is used as a criterion to justify the requirement for the critical use of methyl bromide, using as a guide the economic criteria contained in section 4 of annex I to the present report;

10. To request each Party from 1 January 2005 to provide to the Ozone Secretariat a summary of each crop or post-harvest nomination containing the following information:

- (a) Name of the nominating Party
- (b) Descriptive title of the nomination;
- (c) Crop name (open field or protected) or post-harvest use;
- (d) Quantity of methyl bromide requested in each year;
- (e) Reason(s) why alternatives to methyl bromide are not technically and economically feasible;

11. To request the Ozone Secretariat to post the information submitted pursuant to paragraph 7 above, categorized according to the year in which it was received, on its web site within 10 days of receiving the nomination;

12. To request the Technology and Economic Assessment Panel to:

(a) Identify options which Parties may consider for preventing potential harmful trade of methyl bromide stocks to Article 5 Parties as consumption is reduced in non-Article 5 Parties and to publish its evaluation in 2005 to enable the Seventeenth Meeting of the Parties to decide if suitable mitigating steps are necessary;

(b) Identify factors which Article 5 Parties may wish to take into account in evaluating whether they should either undertake new accelerated phase-out commitments through the Multilateral Fund for the Implementation of the Montreal Protocol or seek changes to already agreed accelerated phase-outs of methyl bromide under the Multilateral Fund;

(c) Assess “economic infeasibility”, based on the methodology

submitted by the nominating Party under paragraph 6 above, in making its recommendations on each critical-use nomination. The report by the Technology and Economic Assessment Panel should be made with a view to encouraging nominating Parties to adopt a common approach in assessing the economic feasibility of alternatives;

(d) Submit a report to the Open-ended Working Group at its twenty-sixth session on the possible need for methyl bromide critical uses over the next few years, based on a review of the management strategies submitted by Parties pursuant to paragraph 3 of the present decision;

(e) Review critical-use nominations on an annual basis and apply the criteria set forth in decision IX/6 and of other relevant criteria agreed by the Parties;

(f) Recommend an accounting framework for adoption by the Sixteenth Meeting of the Parties which can be used for reporting quantities of methyl bromide produced, imported and exported by Parties under the terms of critical-use exemptions, and after the end of 2005 to request each Party which has been granted a critical-use exemption to submit information together with its nomination using the agreed format;

(g) Provide, in consultation with interested Parties, a format for a critical-use exemption report, based on the content of annex I to the present report, for adoption by the Sixteenth Meeting of the Parties, and to request each Party which reapplies for a methyl bromide critical-use exemption after the end of 2005 to submit a critical-use exemption report in the agreed format;

(h) Assess, annually where appropriate, any critical-use nomination made after the end of 2006 in the light of the Methyl Bromide Alternatives Database information submitted pursuant to paragraph 1 of the present decision, and to compare, annually where appropriate, the quantity, in the nomination, of methyl bromide requested and recommended for each pre-harvest and post-harvest use with the management strategy submitted by the Party pursuant to paragraph 3 of the present decision;

(i) Report annually on the status of re-registration and review of methyl bromide uses for the applications reflected in the critical-use exemptions, including any information on health effects and environmental acceptability;

(j) Report annually on the status of registration of alternatives and substitutes for methyl bromide, with particular emphasis on possible regulatory actions that will increase or decrease dependence on methyl bromide;

(k) Modify the Handbook on Critical-use Nominations for Methyl Bromide to take the present decision and other relevant information into account, for submission to the Sixteenth Meeting of the Parties.

Decision Ex.I/5. Review of the working procedures and terms of reference of the Methyl Bromide Technical Options Committee

Acknowledging with appreciation the important and valuable work undertaken so far by the Methyl Bromide Technical Options Committee,

Reaffirming the need for the Methyl Bromide Technical Options Committee to sustain an optimum level of expertise to be able to address diverse types of alternatives to methyl bromide and the desirability of having a reasonable term of membership of the Methyl Bromide Technical Options Committee to ensure continuity;

Noting decision XIII/11, which requests the Technology and Economic Assessment Panel to engage suitably qualified agricultural economists to assist in reviewing nominations,

Recognizing the desirability of ensuring that some members of the Methyl Bromide Technical Options Committee have knowledge of alternatives that are used in commercial practice, and practical experience in technology transfer and deployment,

Recognizing the need to strengthen the Methyl Bromide Technical Options Committee and to enhance the transparency and efficiency of the Committee's process relating to the evaluation of nominations for critical-use exemptions,

Noting the terms of reference for the Technology and Economic Assessment Panel and its technical options committees adopted at the Eighth Meeting of the Parties,

Mindful that those terms of reference state that the overall goal is to achieve a representation of about 50 per cent for Article 5 Parties and noting that current Article 5 representation within the Methyl Bromide Technical Options Committee is only about 30 per cent,

Recalling decision XV/54 on categories of assessment to be used by the Technology and Economic Assessment Panel when assessing critical uses of methyl bromide,

1. To establish a process to review the working procedures and terms of reference of the Methyl Bromide Technical Options Committee as they relate to the evaluation of nominations for critical use exemptions;
2. That such a review shall consider, in particular:
 - (a) The need to enhance the transparency and efficiency of the analysis and reporting by the Methyl Bromide Technical Options Committee on critical-use nominations, including the communication between the nominating Party and the Methyl Bromide Technical Options Committee;
 - (b) The timing and structure of the Methyl Bromide Technical Options Committee reports on critical-use nominations;
 - (c) The duration and rotation of membership, taking into account the need to provide for a reasonable turnover of members while also ensuring continuity;

- (d) The conflict-of-interest documents which must be completed by members of the Methyl Bromide Technical Options Committee;
 - (e) The expertise required in the Methyl Bromide Technical Options Committee, taking into account among other things that the composition of the Methyl Bromide Technical Options Committee should ensure that some members have practical and first-hand experience which should relate, in particular, to replacing methyl bromide with alternatives, and that within that composition reflected the appropriate skills and expertise required to perform the work of Methyl Bromide Technical Options Committee, including expertise in the field of agricultural economy, technology transfer and regulatory processes of registration;
 - (f) The criteria and procedure for selecting the experts, including ensuring a balance between experts from Article 5 and non-Article 5 Parties, pursuant to the qualification requirements as set forth in subparagraph (e) above;
 - (g) Further guidance on the application of the criteria set forth in decision IX/6;
 - (h) The modalities for the Methyl Bromide Technical Options Committee to submit annual work plans to the Meeting of the Parties;
 - (i) The instances where the Methyl Bromide Technical Options Committee should seek the guidance of the Meeting of the Parties in conducting its work;
 - (j) Modalities for the Methyl Bromide Technical Options Committee to provide the Meeting of the Parties with budget proposals for the conduct of the Committee's work through the Secretariat;
3. To establish to that end an ad hoc working group which shall meet for three days immediately prior to the twenty-fourth meeting of the Open-ended Working Group and shall comprise 12 representatives of Article 5 Parties and 12 representatives of non-Article 5 Parties;
 4. To invite the co-chairs of the Methyl Bromide Technical Options Committee to participate in the meeting of the ad hoc working group;
 5. That the ad hoc working group should base its discussions on the Methyl Bromide Technical Options Committee-related elements and issues set forth in paragraph 2 above and shall report its findings and recommendations to the Open-ended Working Group at its twenty-fourth session;
 6. To request the Open-ended Working Group at its twenty-fourth session to formulate recommendations for the consideration and approval of the Sixteenth Meeting of the Parties and to identify which elements, if any, could be used on an interim basis pending approval by the Sixteenth Meeting of the Parties;
 7. That the Methyl Bromide Technical Options Committee should continue to assess the nominations as "recommended", "not recommended" or "unable to assess".

8. That the reports of the Technology and Economic Assessment Panel and its Methyl Bromide Technical Options Committee, to be published following those bodies' initial assessment of nominations submitted in 2004 and following the subsequent assessment of any additional information submitted by nominating Parties, should include:

- (a) If the Panel and Committee do not recommend any part of a nomination, a clear description of the nominating Party's request for an exemption and of the reasons why the Panel and Committee did not accept it, including references to the relevant studies, wherever available, used as the basis for such a decision;
- (b) If the Panel and Committee require additional information, a clear description of the information required.

[Decisions on essential uses deleted]:

Appendix C. Reporting Accounting Framework for Critical Uses of Methyl Bromide

[This draft framework has two parts – a summary table, based closely on the reporting framework for essential uses, and a new table for reporting against individual Critical Use Exemptions.]

All quantities of methyl bromide should be in metric tonnes.

Form 1 – Summary form

| A Year of Critical Use | B Quantity Exempted for year of Critical Use ¹ | C Quantity Acquired by Production for CUE | D Quantity Acquired for Critical Use by Import and Country(s) of Production | | E (C+D) Total Quantity Acquired for Critical Use | F (B-E) Authorised but not Acquired | G Stocks on Hand - Start of Year ² | H (G+E) Available for Use in Current Year | I Used for Critical Use | J Quantity Destroyed by Approved Processes | K ² (H-I-J) Stocks on Hand - End of Year ³ |
|---------------------------------|---|--|---|------------|--|---|---|--|----------------------------------|---|--|
| | | | Amount | Country(s) | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

- 1 Note that critical use for particular year may be the sum of quantities authorised by decision in more than one year.
- 2 Where possible, national governments should include quantities on hand as of 1 January 2005. National governments not able to estimate quantities on hand as of 1 January 2005 can track the subsequent inventory of methyl bromide produced for critical uses (Column K).
- 3 Carried forward as "On Hand at Start of Year" for next year.

Form 2 – Details of consumption by individual CUE

[This form provides consumption figures for individual CUEs exempted for a specific use in a particular year]

| L Year of Critical Use | M Critical Use - Short Title | M Quantity Exempted for this Use | O Quantity used in year for this CUE |
|------------------------------|---------------------------------|---|--|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | Total ⁴ | |

4 Total quantity in Column O should correspond with the total of Column I.

[Question arising from this draft – at what point in the supply chain of MB from point of manufacture or import to release in course of application as a fumigant does the quantity of MB become stock on hand? Is this the same as referred to in Dec IX/6 (1,b,i)?]

Appendix D. Working procedures of MBTOC in relation to review of CUNs

[*** add here - committee composition, TOR, disclosure of interest and process to ensure unbiased advice to Parties , process of consideration of CUNs, logic diagrams, generalisations (rebuttable guidelines)]