2017 FIRST CONSULTATION

1 July – 30 September 2017

Compiled comments for Draft ISPM on Requirements for the use of fumigation treatments as a phytosanitary measure (2014-004)

Summary comments

Name	Summary
Cameroon [Africa]	Examen achevé
EPPO [Central Asia and Eastern Europe; European Union; Israel; Norway; Switzerland] Σ	Finalised by the EPPO Secretariat on behalf of its 51 Member Countries.
European Union [European Union]	Finalised by the European Commission on 27 September 2017 on behalf of the EU and its 28 Member States.
Jamaica [Caribbean]	The Standard for fumigation as a phytosanitary treatment is timely.
Malaysia [Asia]	The Appendixes 1,2 and 3 are useful as a quick reference
South Africa [Africa]	Request reason/s why an audit of laboratories is not included or should not be covered by this draft.
Trinidad and Tobago [Caribbean]	Trinidad and Tobago is in agreement with the reviews of the IPPC Regional Workshop Caribbean.

#	Para	Text	Comment
1	G	(General Comment)	**Congo, DR** - Observation Technique : les membres ont jugé que le tableau des fumigants soient maintenues mais dans les annexes. *Category : TECHNICAL*
2	G	(General Comment)	**Congo, DR** - Paragraphe 68 sur le maintien du Bromure de méthyl dans la liste des fumigants: les membres ont trouvé la recommandation de la CIPV publiée en mars 2017 et d'autres recommandations(la convention de Rotterdam) ont interdit l'usage du Bromure de méthyl. Ils ne trouvent pas opportun son maintien dans la liste des fumigants. Les participants demandent plus d'éclaircissement sur ce point auprès du comité des Normes. *Category : TECHNICAL*
3	G	(General Comment)	**Tajikistan** We support comments submitted during our discussions at the IPPC Regional workshop Central Asia and Central Europe conclusions. *Category : SUBSTANTIVE*
4	G	(General Comment)	**Costa Rica** Se recomienda que sea un anexo a la norma 28, en virtud de la vinculación con la materia que regula, Es una norma que da buenos detalles y orientación de como aplicar un tratamiento eficazmente. Algunos términos técnicos a los largo de la norma deben ser

#	Para	Text	Comment
			revisados para alinearlos con los que técnicamente corresponda. También deber hacerse una revisión de otros términos de forma tal que sea homogéneo en el texto (IPPC Workshop LA) The appendix 1 on studies for treatment efficacy are not a requirement of this standard and should be deleted. The standard provides technical guidances on the application of treatments with a stated efficacy. Appendix 1 provides useful information to contracting parties, but should be included as an appendix of ISPM 28. Taking into account that the revision of ISPM 18 is in the LOT for ISPMs, we also suggest to include Appendix 2 of ISPM 18 as an appendix of ISPM 28. *Category : SUBSTANTIVE*
5	G	(General Comment)	**IPPC Regional Workshop Asia** For the entire draft where requirements have been cited in specific numbers, TPP should provide the appropriate technical justifications for the citation of these figures. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Viet Nam** Vietnam agreed with APPPC comment. **Singapore** singapore agreed to this regional comments. **Lao People's Democratic Republic** Lao PDR agreed to this regional comments. **China** China agreed to this regional comments. **Thailand** Thailand agree with APPPC comment. **Nepal** Support to Regional Comment **Japan** Japan support regional comment. *Category : TECHNICAL*
6	G	(General Comment)	**Canada** Canada supports the proposed Draft ISPM: Requirements for the use of fumigation as a phytosanitary measure (2014-004). Substantive, technical and editorial comments are presented for consideration. Status box *Category : SUBSTANTIVE*
7	G	(General Comment)	**COSAVE** The draft is focused on fumigations conducted in facilities, which mainly apply on packed commodities or some fruits/horticultural products, but little guidance is provided for fumigations of bulk commodities, which have very different conditions of application. Therefore, we suggest the revision of the draft in order to take this situation into account or to explicitly exclude the fumigations of bulk commodities from the Scope *Category : SUBSTANTIVE*
8	G	(General Comment)	**Ecuador** Se considera que Apéndice 1 de este borrador no debería ser parte de la norma, sino que el mismo debe formar parte de los apéndices de la NIMF 28 (Tratamientos fitosanitarios para plagas reglamentadas).

#	Para	Text	Comment
			Category : SUBSTANTIVE
9	G	(General Comment)	**Peru** The draft is focused on fumigations conducted in facilities, which mainly apply on packed commodities or some fruits/horticultural products, but little guidance is provided for fumigations of bulk commodities, which have very different conditions of application. Therefore, we suggest the revision of the draft in order to take this situation into account or to explicitly exclude the fumigations of bulk commodities from the Scope, As commented in the first consultation of the draft on temperature treatments, Appendix 1 on studies for treatment efficacy are not a requirement of this standard and should be deleted. The standard provides technical guidance on the application of treatments with a stated efficacy. Appendix 1 provides useful information to contracting parties, but should be included as an appendix of ISPM 28. Taking into account that the revision of ISPM 18 is in the LOT for ISPMs, we also suggest to include Appendix 2 of ISPM 18 as an appendix of ISPM 28. It is necessary to clarify the terms "Schedule" and "protocol" troughout the draft. If they have different meaning, should be defined. Both terms are translated as "protocolo" into Spanish. *Category : SUBSTANTIVE*
10	G	(General Comment)	**Azerbaijan** Azerbaijan would like to formally endorse the EPPO coments submitted via the IPPC Online Comment System *Category : SUBSTANTIVE*
11	G	(General Comment)	**Nicaragua** Se propone que "El Proyecto de NIMF: Requisitos para el uso de la fumigación como medida fitosanitaria (2014-004)", se traslade como un anexo de la NIMF N° 28 ya que es vinculante con la norma en mención. *Category : TECHNICAL*
12	G	(General Comment)	**Swaziland** Draft ISPM is acceptable as is *Category : SUBSTANTIVE*
13	G	(General Comment)	**Mozambique** The NPPO of Mozambique do support this standard, "no specific comments". Nevertheless as a less developed country we will face challenges with equipment/infrastructure to fulfill the fumigation accordingly, so it may take long time to implement efficiently. Also there is need for training of staff in order to perform the fumigation according to the standard *Category : SUBSTANTIVE*
14	G	(General Comment)	**Brazil** It is necessary to clarify the terms "Schedule" and "protocol" troughout the draft. If they have different meaning, should be defined. Both terms are translated as "protocolo" into Spanish. *Category : SUBSTANTIVE*
15	G	(General Comment)	**Brazil** As commented in the first consultation of the draft on temperature treatments, Appendix 1 on studies for treatment efficacy are not a requirement of this standard and should be deleted. The standard provides technical guidance on the application of treatments with a

#	Para	Text	Comment
			stated efficacy. Appendix 1 provides useful information to contracting parties, but should be included as an appendix of ISPM 28. Taking into account that the revision of ISPM 18 is in the LOT for ISPMs, we also suggest to include Appendix 2 of ISPM 18 as an appendix of ISPM 28. *Category : SUBSTANTIVE*
16	G	(General Comment)	**Brazil** The draft is focused on fumigations conducted in facilities, which mainly apply on packed commodities or some fruits/horticultural products, but little guidance is provided for fumigations of bulk commodities, which have very different conditions of application. Therefore, we suggest the revision of the draft in order to take this situation into account or to explicitly exclude the fumigations of bulk commodities from the Scope. *Category : SUBSTANTIVE*
17	G	(General Comment)	**Ozone Secretariat** With respect to Draft ISPM of requirements of Fumigation: Overall, this draft ISPM contains specific figures for such as appropriate numbers of temperature sensor in fumigation chamber or ventilation holes on a package, but background data of the figures are not cited. We cannot examine whether these figures are appropriate or not. ISPMs and particularly on phytosanitary measures should clearly indicate that specific figures included are examples, given that such figures change depending on commodities, fumigants and other factors. *Category : SUBSTANTIVE*
18	G	(General Comment)	**Japan** 1. References to evaluate the validity of standard values described in this draft ISPM are not shown, therefore these description should be deleted. However, as standard values are important for the implementation of this ISPM, they should be described as long as their technical justification is indicated as references. 2. Consideration should be given to make it possible to refer this draft ISPM properly when fumigation is conducted according to ISPM28 Annexes. *Category : SUBSTANTIVE*
19	G	(General Comment)	**Argentina** The draft is focused on fumigations conducted in facilities, which mainly apply on packed commodities or some fruits/horticultural products, but little guidance is provided for fumigations of bulk commodities, which have very different conditions of application. Therefore, we suggest the revision of the draft in order to take this situation into account or to explicitly exclude the fumigations of bulk commodities from the Scope *Category : SUBSTANTIVE*
20	G	(General Comment)	**Argentina** As commented in the first consultation of the draft on temperature treatments, Appendix 1 on studies for treatment efficacy are not a requirement of this standard and should be deleted. The standard provides technical guidance on the application of treatments with a stated efficacy. Appendix 1 provides useful information to contracting parties, but should be included as an appendix of ISPM 28. Taking into account that the revision of ISPM 18 is in the LOT for ISPMs, we also suggest to include Appendix 2 of ISPM 18 as an appendix of ISPM 28. *Category : SUBSTANTIVE*
21	G	(General Comment)	**Argentina** It is necessary to clarify the terms "Schedule" and "protocol" troughout the draft. If they have different meaning, should be defined. Both terms are translated as "protocolo" into Spanish.

#	Para	Text	Comment
			Category : SUBSTANTIVE
22	G	(General Comment)	**Jamaica** Fumigation has been used for phytosanitary treatment for decades. A standard to ensure harmonization is therefore timely. *Category : SUBSTANTIVE*
23	G	(General Comment)	**Ozone Secretariat** The fumigation document seems to confuse high level for some areas and excess detail in others e.g. detailed calculation on CT with no explanation as to what it is or why its important. Many developing countries would struggle to meet the some requirements such as number of temperature recordings. Does not cover the different properties or application of various gases very well. We think it should be about the general principles rather than try to be a fumigation manual. *Category : SUBSTANTIVE*
24	G	(General Comment)	**CA** The appendix 1 on studies for treatment efficacy are not a requirement of this standard and should be deleted. The standard provides technical guidances on the application of treatments with a stated efficacy. Appendix 1 provides useful information to contracting parties, but should be included as an appendix of ISPM 28. Taking into account that the revision of ISPM 18 is in the LOT for ISPMs, we also suggest to include Appendix 2 of ISPM 18 as an appendix of ISPM 28. (Accepted from IPPC regional workshop) *Category : SUBSTANTIVE*
25	G	(General Comment)	**Guyana** This ISPM Standard is of great importance for Trade facilitation. *Category : SUBSTANTIVE*
26	G	(General Comment)	**Mongolia** Mongolia support regional comments *Category : SUBSTANTIVE*
27	G	(General Comment)	**Turkey** We agree to the comments indicated in IPPC Regional workshop Central Asia and Central Europe conclusions. *Category : SUBSTANTIVE*
28	G	(General Comment)	**Saint Vincent and The Grenadines** This is timely and relevant ISPM of importance to the Region. *Category : SUBSTANTIVE*
29	G	(General Comment)	**EPPO** 'Monitoring' (and all its derivates) is defined in ISPM 5 ("an official ongoing process to verify phytosanitary situations") with another meaning than the one usually used in this Standard (i.e. measuring/verifying parameters over a period of time). It seems that the term monitoring can be kept as it is in this standard because it is a term commonly used and understood in its common dictionary meaning ("measure at intervals") and for which no exact synonym exists. However, we would like to signal to the TPG that the use of this term in this Standard (except for Section 10 'Authority') is not according to ISPM 5. In addition, the same problem is noted for some occurrences of the term 'monitoring' in ISPMs 15 and 18. *Category : TECHNICAL*

#	Para	Text	Comment
30	G	(General Comment)	**EPPO** The SC and TPPT should consider how the hierarchy of future and already adopted treatments should fit under ISPM28 or under the new Standard. *Category : SUBSTANTIVE*
31	G	(General Comment)	**Myanmar** Myanmar agree with APPPC comment *Category : TECHNICAL*
32	G	(General Comment)	**Tuvalu** No comments has add to this draft *Category : SUBSTANTIVE*
33	G	(General Comment)	**IPPC Regional Workshop Near East** The standard is useful. we are agreement to keep the appendices Potential Implementation issues: we acknowledge that the labelling is optional, however, there is a concern that applying the labelling can be challenging as the text s not very clear as well it is not easy to access the commodity after treatment to add the label **Libya** agree *Category : SUBSTANTIVE*
34	G	(General Comment)	**Colombia** El apéndice 1 sobre los estudios para la eficacia del tratamiento no es un requisito de esta norma y debe suprimirse. La norma proporciona directrices técnicas sobre la aplicación de tratamientos con una eficacia declarada. El apéndice 1 proporciona información útil a las partes contratantes, pero debe incluirse como apéndice de la NIMF 28. Teniendo en cuenta que la revisión de la NIMF 18 se encuentra en el LOT para las NIMF, también sugerimos incluir el apéndice 2 de la NIMF 18 como apéndice de la NIMF 28. *Category : SUBSTANTIVE*
35	G	(General Comment)	**United States of America** Regarding terminology: "Providers" is used in ISPM 15. The World Customs Organization uses both providers and entities. Entities has a legal definition. It should be verified whether providers are a subset of entities. *Category : SUBSTANTIVE*
36	G	(General Comment)	**European Union** Required parameters (as CT, temperature and minimum dose (as in para 163)) necessary to be reached during the fumigation treatment should be made clear in the same way in other with fumigation related standards (e.g., ISPM 15, ISPM 28, future ISPM about chemical treatments). *Category : TECHNICAL*
37	G	(General Comment)	**European Union** 'Monitoring' (and all its derivates) is defined in ISPM 5 ("an official ongoing process to verify phytosanitary situations") with another meaning than the one usually used in this Standard (i.e. measuring/verifying parameters over a period of time). It seems that the term monitoring can be kept as it is in this standard because it is a term

#	Para	Text	Comment
			commonly used and understood in its common dictionary meaning ("measure at intervals") and for which no exact synonym exists. However, we would like to signal to the TPG that the use of this term in this Standard (except for Section 10 'Authority') is not according to ISPM 5. In addition, the same problem is noted for some occurrences of the term 'monitoring' in ISPMs 15 and 18. A footnote to this standard should be added the first time 'monitoring' is used in this standard, as follows: 'In this standard, monitoring is not always being used as defined in ISPM 5''. *Category : TECHNICAL*
38	G	(General Comment)	**European Union** The SC and TPPT should consider the relationship between this standard, ISPM28 and treatment standards/annexes which will be adopted in the future, and how this could be clearly expressed in this standard. *Category : SUBSTANTIVE*
39	G	(General Comment)	**New Zealand** There seem to be inconsistencies between the fum and heat ttm standards eg 207-211? ht 232 fum Text in fumo ISPM para 232 not in temp ISPM. 213 ht 236 fum Why say "small scale trails " in temp ISPM and "preliminary trails" in fumo ISPM? 213 ht 238 fum Why is the comment on "treatments for more than one commodity" in the temp ISPM not also in the fumo ISPM? 237-243 ht 247-248 fum Why is the text on documentation in the fumo ISPM so much less detailed than that of the temp ISPM? It is suggested that treatment provider, as used in ISPM 15, replace entities in paras 41,52,53,168,169,171,176,183,185,186,189,192,194,204,205,206, and 225. *Category : TECHNICAL*
40	G	(General Comment)	**Uruguay** It is necessary to clarify the terms "Schedule" and "protocol" troughout the draft. If they have different meaning, should be defined. Both terms are translated as "protocolo" into Spanish. *Category : SUBSTANTIVE*
41	G	(General Comment)	**Uruguay** As commented in the first consultation of the draft on temperature treatments, Appendix 1 on studies for treatment efficacy are not a requirement of this standard and should be deleted. The standard provides technical guidance on the application of treatments with a stated efficacy. Appendix 1 provides useful information to contracting parties, but should be included as an appendix of ISPM 28. Taking into account that the revision of ISPM 18 is in the LOT for ISPMs, we also suggest to include Appendix 2 of ISPM 18 as an appendix of ISPM 28. *Category : SUBSTANTIVE*
42	G	(General Comment)	**Uruguay** The draft is focused on fumigations conducted in facilities, which mainly apply on packed commodities or some fruits/horticultural products, but little guidance is provided for

#	Para	Text	Comment
			fumigations of bulk commodities, which have very different conditions of application. Therefore, we suggest the revision of the draft in order to take this situation into account or to explicitly exclude the fumigations of bulk commodities from the Scope *Category : SUBSTANTIVE*
43	G	(General Comment)	**Bahamas** Currently, fumigation is not a standard that the Bahamas imposes on any imported goods. Fumigation treatments are usually carried out once a pest has been identified after entry and quarantined. Additionally, there are no existing regulated pest or fumigant lists. This is an important ISPM but does requires further technical consultation. *Category : TECHNICAL*
44	G	(General Comment)	**Jamaica** This ISPM is timely and is of great importance as a phytosanitary measure. *Category : SUBSTANTIVE*
45	G	(General Comment)	**IPPC Regional Workshop Caribbean** This is timely and relevant ISPM of importance to the Region. *Category : SUBSTANTIVE*
46	G	(General Comment)	**IPPC Regional Workshop Africa** à la question posée sur "potential implementation issues", avec la précision issue de la présentation powerpoint de cette NIMP, les participants proposent que ces 2 appendix soient retenus, parce qu'ils revêtent un caractère pratique. *Category : SUBSTANTIVE*
47	G	(General Comment)	**IPPC Regional Workshop Africa** en faisant référence à la recommandation de la CIPV sur le remplacement ou la restriction de l'usage du bromure de méthyl comme mesure phytosanitaire, adoptée en 2008 et publiée en 2017, le bromure de méthyl ne devrait pas être mentionné dans ce tableau pour le respect de cette recommandation *Category : TECHNICAL*
48	G	(General Comment)	**IPPC Regional Workshop Africa** le tableau des fumigants qui représente l'appendix 2 doit être ramener en annexe de la NIMP que de le garder dans le corps de la NIMP *Category : SUBSTANTIVE*
49	G	(General Comment)	**Trinidad and Tobago** This standard is of great importance as it is a key phytosanitary measure used internationally. There is a the need for technical and specific guidance for the application of the measure. *Category : EDITORIAL*
50	G	(General Comment)	**Barbados** This is a timely ISPM given that the fumigation is an important mitigation measure and provides the regional NPPOs with a checklist of what is required to properly perform this action. *Category : EDITORIAL*
51	G	(General Comment)	**Honduras** HONDURAS NO TIENE COMENTARIOS *Category : TECHNICAL*
52	G	(General Comment)	**IPPC Regional Workshop Latin America** The appendix 1 on studies for treatment efficacy are not a requirement of this standard and should be deleted. The standard provides technical guidances on the application of treatments with a stated efficacy. Appendix 1 provides useful information to contracting

#	Para	Text	Comment
			parties, but should be included as an appendix of ISPM 28. Taking into account that the revision of ISPM 18 is in the LOT for ISPMs, we also suggest to include Appendix 2 of ISPM 18 as an appendix of ISPM 28. *Category : SUBSTANTIVE*
53	G	(General Comment)	**Azerbaijan** Большинство примеров практической работы дано на применении метил бромида, что не желательно. *Category : TECHNICAL*
54	G	(General Comment)	**Armenia** Предложения и комментарии по проекту Требований к использованию фумигации в качестве фитосанитарной меры (2014-004) Общее предложение: оставить приложения 2 и 3 «Химические свойства и расчет объема», т. к. представлена полезная и обобщенная с разных источников информация. *Category : SUBSTANTIVE*
55	G	(General Comment)	**China** Appendix 2 and 3 need to be kept in the standard in order to provide reference to developing country. *Category : SUBSTANTIVE*
56	G	(General Comment)	**India** 2. Fumigation Entities: warehouses shall be added with cargo ship hold 4.2 Combinations with other fumigants or treatments: unmarketable shall be deleted 6.5 Gas tightness test: Is gas tightness test required for the sheet fumigation enclosures of temporary nature shall be added. 6.9 6.9 Degassing and Ventilation (Shall be added) The commodity should to be degassed and ventilated safely after successful completion of the fumigation. The commodity should be declared safe for handing after fumigation by achieving Threshold Limit value. 6.10 Fumigation certificate Fumigation entities should issue a Fumigation certification in the prescribed format for every successful fumigation. (Appendix 45). Appendix 4: List of Fumigation and Safety equipment Appendix 5: Fumigation Certificate should contain the following details. 1. Company name & Address 2. NPPO Registration Nu. aAnd Date 3. Treatment Certificate Number and Date of issue 4. Details of Treatment like Name of Fumigant, Date of Fumigation, Place of Fumigation, Dosage of Fumigation, Duration of Fumigation, AmbinetAmbient Temperature, Type of Encloseure 5. Description of goods: Container Number, Name and Address of Exporter, Name and Address of Consignee, Type and Description of cargecargo, Quantity, packaging material, shipping mark, 6. Name and Signature of the Fumigation Operator

#	Para	Text	Comment
			7. Name and signature of the NPPO officer, itif fumigation supervised. shall be added Appendix 4 and Appendix list 5. Indian Standards on Fumigation treatments NSPM 9 Guidelines for Certification of Forced Hot-Air Treatment Facilities for Wood Packaging Material (in line with ISPM 15) country NSPM 11 Quarantine Treatments and Application Procedures: I. Methyl Bromide Fumigation NSPM 12 Guidelines for Assessment, Audit and Accreditation of Fumigation Agencies for Undertaking Methyl Bromide Fumigation (PCOs) NSPM – 22: Guidelines for Accreditation of Fumigation Agency for undertaking ALP Fumigation. *Category : SUBSTANTIVE*
57	G	(General Comment)	**South Africa** The National Plant Protection Organisation of South Africa has no comments on this draft specification. *Category : EDITORIAL*
58	G	(General Comment)	**Egypt** Egypt agrees to move forward with draft standards. No comment *Category : SUBSTANTIVE*
59	G	(General Comment)	**Algeria** No Comment *Category : TECHNICAL*
60	G	(General Comment)	**Iraq** No comments *Category : TECHNICAL*
61	G	(General Comment)	**Bahrain** There is no comment *Category : EDITORIAL*
62	G	(General Comment)	**Tuvalu** no comment on this *Category : SUBSTANTIVE*
63	G	(General Comment)	**PPPO** have a system to differentiate *Category : SUBSTANTIVE*
64	G	(General Comment)	**PPPO** In the Pacific Region, are some NPPO that are also managing fumigation facilities in line to the proposed change from entity to fumigation providers? some wording around fumigation providers whether NPPO or third parties fumigation providers? *Category : SUBSTANTIVE*
65	G	(General Comment)	**PPPO** replace the word entities with fumigation providers in the entire document standard. *Category : SUBSTANTIVE*
66	G	(General Comment)	**COSAVE** It is necessary to clarify the terms "Schedule" and "protocol" trough all the draft. If they have different meaning, should be defined.

#	Para	Text	Comment
			In Spanish both term are translated as "protocolo". *Category : SUBSTANTIVE*
67	G	(General Comment)	**COSAVE** As commented in the first consultation of draft on temperature treatment , appendix 1 on studies for treatment efficacy are not a requirement of this standard and should be deleted. The standard provides technical guidances on the application of treatments with a stated efficacy. Appendix 1 provides useful information to contracting parties, but should be included as an appendix of ISPM 28. Taking into account that the revision of ISPM 18 is in the LOT for ISPMs, we also suggest to include Appendix 2 of ISPM 18 as an appendix of ISPM 28. *Category : SUBSTANTIVE*
68	G	(General Comment)	**Nicaragua** En todo el documento se debe sustituir el verbo DEBERIA por el verbo DEBE. Esto es porque este documento es mandatorio y en la lectura del verbo "debería" lo deja opcional para su cumplimiento. *Category : TECHNICAL*
69	G	(General Comment)	**Colombia** Tal como se acordó en el Taller Regional el apéndice 1 sobre los estudios para la eficacia del tratamiento no es un requisito de esta norma y debe suprimirse. La norma proporciona directrices técnicas sobre la aplicación de tratamientos con una eficacia declarada. El apéndice 1 proporciona información útil a las partes contratantes, pero debe incluirse como apéndice de la NIMF 28. Teniendo en cuenta que la revisión de la NIMF 18 se encuentra en el LOT para las NIMF, también sugerimos incluir el apéndice 2 de la NIMF 18 como apéndice de la NIMF 28. *Category : SUBSTANTIVE*
70	G	(General Comment)	**Panama** Se recomienda que este documento sea trasladado como un anexo a la NIMF No. 28, en virtud de la vinculación con la materia que regula. *Category : SUBSTANTIVE*
71	G	(General Comment)	**Panama** Se reitera la importancia de llevar a cabo las traducciones de la mejor manera, ya que son documentos técnicos muy específicos, que necesitan ser bien entendidos. *Category : TRANSLATION*
72	G	(General Comment)	**Panama** Proyecto de NIMF: Requisitos para el uso de la fumigación como medida fitosanitaria (2014-004).. Usar en toda la norma presente la palabra "fumigación" en lugar de "tratamiento"; para estar en consistente con el título, ámbito y texto de la presente norma. *Category : TECHNICAL*
73	G	(General Comment)	**IPPC Regional Workshop Latin America** Se requiere una revisión global de la norma en relación al término "fumigación" que debe ser usado en todo el texto y el término empleado "tratamiento" debe ser cambiado por "fumigación" *Category : EDITORIAL*
74	G	(General Comment)	**OIRSA** Usar en toda la norma presente la palabra "fumigación" en lugar de "tratamiento"; para

#	Para	Text	Comment
			estar en consistente con el título, ámbito y texto de la presente norma. *Category : TECHNICAL*
75	G	(General Comment)	**OIRSA** Se reitera la importancia de llevar a cabo las traducciones de la mejor manera, ya que son documentos técnicos muy específicos, que necesitan ser bien entendidos. *Category : TRANSLATION*
76	G	(General Comment)	**OIRSA** el presente proyecto de NIMF, debe ser trasladado como un anexo a la NIMF No. 28, en virtud de la vinculación con la materia que regula. *Category : SUBSTANTIVE*
77	G	(General Comment)	**Cameroon** Ces exigences sont pertinentes, car elles viennent apporter plus de clarté dans la mise en oeuvre les traitements phytosanitaires par fumigation. En outre, elles enrichissent le cadre technique en fournissant des détails sur le processus et les points d'intéret à suivre. *Category : TECHNICAL*
78	29	[Text to this paragraph will be added following adoption.~~]~~] Nigeria is in agreement with the draft	**Nigeria** *Category : TECHNICAL*
79	32	This standard provides technical guidance for NPPOs on the specific procedures for the application of fumigation as a phytosanitary measure for regulated pests ~~or~~ on regulated articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. ~~Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).~~	**IPPC Regional Workshop Asia** 1. amend to "on regulated" 2. 3rd sentence to be moved to Background **APPPC** agreed by APPPC **Singapore** Singapore support IPPC Regional Workshop Asia's Comments. **China** China agreed to this regional comments. **Thailand** Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. **Korea, Republic of** Republic of Korea agree with APPPC comment. **Nepal** Support to Regional Comment **India** India agree to the comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : SUBSTANTIVE*
80	32	This standard provides technical guidance for NPPOs on the ~~specific procedures for the~~ application of fumigation treatment as a phytosanitary measure for regulated pests ~~or~~ on regulated articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. ~~Requirements of temperature, dosage, duration, minimum concentration readings at time intervals,~~	**Peru** Proposed changes are for consistency. Use of the Glossary term "regulated article". Deleted text describes the requirements of specific fumigation treatments adopted as Annexes to ISPM 28 and are not covered in general by ISPM 28. *Category : TECHNICAL*

#	Para	Text	Comment
		~~and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).~~	
81	32	This standard provides technical guidance for NPPOs on the ~~specific procedures for~~ the application of fumigation treatment as a phytosanitary measure for regulated pests ~~or~~ on regulated articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments~~. .Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).~~	**Argentina** Proposed changes are for consistency. Use of the Glossary term "regulated article". Deleted text describes the requirements of specific fumigation treatments adopted as Annexes to ISPM 28 and are not covered in general by ISPM 28. *Category : TECHNICAL*
82	32	This standard provides technical guidance for NPPOs on the specific procedures for the application of fumigation as a phytosanitary measure for regulated pests ~~or~~ on regulated articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. ~~Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 19:01 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
83	32	This standard provides technical guidance for NPPOs on the specific procedures for the application of fumigation as a phytosanitary measure for regulated pests ~~or~~ on regulated articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. ~~Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).~~	**IPPC Regional Workshop Latin America** use glossary term "regulated articles". Deleted text describes the requirements of specific fumigation treatments adopted as annexes of ISPM 28 and are not covered in general by ISPM 28. *Category : TECHNICAL*
84	32	This standard provides technical guidance for NPPOs on the ~~specific procedures for the~~ application of fumigation treatment as a phytosanitary measure for regulated pests ~~or~~ on regulated articles. This includes treatments based on the	**Brazil** Proposed changes are for consistency. Use of the Glossary term "regulated article". Deleted text describes the requirements of specific fumigation treatments adopted as Annexes to ISPM 28 and are not covered in general by ISPM 28. *Category : TECHNICAL*

#	Para	Text	Comment
		application of chemicals in a gaseous form within enclosed environments. ~~Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).~~	
85	32	This standard provides technical guidance and requirements for NPPOs on the ~~specific procedures for the~~ application of fumigation as a phytosanitary measure for regulated pests ~~or~~ on regulated articles, specifically treatments adopted under ISPM 28. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).	**EPPO** Clearer and consistency with draft standard on temperature treatments. More precise wording (see ISPM 28 and draft ISPM on temperature treatments). 'Requirements' inserted to highlight the most important objective of creating ISPMs. The reference to ISPM 28 here is moved from the current outline, which is proposed to be completely rewritten (back to its original design). (see EPPO comment below) *Category : TECHNICAL*
86	32	This standard provides technical guidance and requirements for NPPOs on the specific procedures for the application of fumigation as a phytosanitary measure for regulated pests or articles, specifically treatments adopted under ISPM 28. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).	**European Union** 'Requirements' inserted to highlight the most important objective of creating ISPMs. The reference to ISPM 28 here is moved from the current 'Outline', which is proposed to be completely rewritten (back to its original design). (see EU comments below on [40] and [41]) *Category : TECHNICAL*
87	32	This standard provides technical guidance for NPPOs on the ~~specific procedures for the~~ application of fumigation as a phytosanitary measure for regulated pests or articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).	**European Union** Clearer and consistency with draft standard on temperature treatments. *Category : EDITORIAL*
88	32	This standard provides technical guidance for NPPOs on	**European Union** More precise wording (see ISPM 28 and draft ISPM on temperature treatments).

#	Para	Text	Comment
		the specific procedures for the application of fumigation as a phytosanitary measure for regulated pests ~~or~~ on regulated articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).	*Category : EDITORIAL*
89	32	This standard provides technical guidance for NPPOs on the ~~specific procedures for the~~ application of fumigation treatment as a phytosanitary measure for regulated pests ~~or~~ on regulated articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. ~~Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).~~	**Uruguay** Proposed changes are for consistency. Use of the Glossary term "regulated article". Deleted text describes the requirements of specific fumigation treatments adopted as Annexes to ISPM 28 and are not covered in general by ISPM 28. *Category : TECHNICAL*
90	32	This standard provides technical guidance for NPPOs on the specific procedures for the application of fumigation as a phytosanitary measure for regulated pests or articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are partly covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).	**Azerbaijan** *Category : EDITORIAL*
91	32	This standard provides technical guidance for NPPOs on the specific procedures for the application of fumigation as a phytosanitary measure for regulated pests or articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).	**Sri Lanka** agreed to the comments made by Thailand *Category : SUBSTANTIVE*

#	Para	Text	Comment
92	32	This standard provides technical guidance for NPPOs on the specific procedures for the application of fumigation as a phytosanitary measure for regulated pests ~~or~~ on regulated articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).	**Thailand** The fumigation treatment should be applied for targeted pest by considering the relationship between the pest and articles. It should also be consistent with draft ISPM: Requirement for the use of temperature as phytosanitary measures. *Category : SUBSTANTIVE*
93	32	This standard provides technical guidance for NPPOs on the specific procedures for the application of fumigation as a phytosanitary measure for regulated pests or articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. ~~Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).~~	**Thailand** The 3rd sentence of the scope should be moved to be under section background because it is not detail of the scope defining in this standard. It is more suitable to be mentioned as a reference in section background. *Category : SUBSTANTIVE*
94	32	This standard provides technical guidance ~~for NPPOs~~ on the specific procedures for the application of fumigation as a phytosanitary measure for regulated pests or articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).	**Thailand** It is redundant. *Category : EDITORIAL*
95	32	This standard provides technical guidance for NPPOs on the ~~specific procedures for the~~ application of fumigation treatment as a phytosanitary measure for regulated pests ~~or~~ on regulated articles. This includes treatments based on the application of chemicals in a gaseous form within enclosed environments. ~~Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (*Phytosanitary treatments for regulated pests*).~~	**COSAVE** Proposed changes are for consistency, use glossary term "regulated articles". Deleted text describes the requirements of specific fumigation treatments adopted as annexes of ISPM 28 and are not covered in general by ISPM 28. *Category : TECHNICAL*

#	Para	Text	Comment
96	32	La presente norma ~~ofrece~~ proporciona orientación técnica a las ONPF sobre los procedimientos específicos para la aplicación de la fumigación como medida fitosanitaria para plagas o artículos reglamentados. Esto incluye los tratamientos basados en la aplicación de ~~productos~~ agentes químicos que alcanzan el producto en forma gaseosa en ~~entornos cerrados~~ambientes e instalaciones herméticas. Los requisitos de temperatura, dosis, duración, mediciones mínimas periódicas de la concentración y otros aspectos fundamentales para una fumigación ~~eficaz~~ efectiva se ~~tratan~~ indican en la NIMF 28 (*Tratamientos fitosanitarios para plagas reglamentadas*).	**Panama** Mejora el entendimiento del párrafo y se debe de respetar los programas de tratamiento. *Category : TRANSLATION*
97	32	La presente norma ~~ofrece~~ proporciona orientación técnica a las ONPF sobre los procedimientos específicos para la aplicación de la fumigación como medida fitosanitaria para plagas o artículos reglamentados. Esto incluye los tratamientos basados en la aplicación de ~~productos~~ agentes químicos que alcanzan al producto en forma gaseosa en ~~entornos cerrados~~ambientes e instalaciones hermeticas. Los requisitos de temperatura, dosis, duración, mediciones mínimas periódicas de la concentración y otros aspectos fundamentales para una fumigación ~~eficaz~~ efectiva se ~~tratan~~ indican en la NIMF 28 (*Tratamientos fitosanitarios para plagas reglamentadas*).	**OIRSA** Mejora el entendimiento del párrafo y se debe de respetar los programas de tratamiento. *Category : TRANSLATION*
98	33	~~This standard does not describe use of modified atmospheres as a phytosanitary treatment.~~	**Costa Rica** Cambio revisado por IPPC Regional Workshop Latin America el 27 sep. 2017 21:26 *Category : TECHNICAL*
99	33	~~This standard does not describe use of modified atmospheres as a phytosanitary treatment.~~	**IPPC Regional Workshop Latin America** This NIMF is specific for fumigation treatments and this para. is not necessary. *Category : TECHNICAL*
100	33	~~This standard does not describe use of modified atmospheres as a phytosanitary treatment.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 18:56 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
101	33	~~En la presente norma no se describe el uso de atmósferas modificadas como tratamiento fitosanitario.~~	**Colombia** Este NIMF es específico para tratamientos de fumigación y este parámetro no es necesario. *Category : SUBSTANTIVE*
102	33	En la presente norma no se ~~describe~~ describen los procedimientos para el uso de atmósferas modificadas como	**Panama** Para hacer concordancia con el ámbito general de la presente norma.

#	Para	Text	Comment
		tratamiento fitosanitario.	*Category : EDITORIAL*
103	33	En la presente norma no se ~~describe~~ describen los procedimientos para el uso de atmósferas modificadas como tratamiento fitosanitario.	**OIRSA** Para hacer concordancia con el ámbito general de la presente norma. *Category : EDITORIAL*
104	36	**CPM R-03.** 2017. Replacement or reduction of the use of methyl bromide as a phytosanitary measure. CPM Recommendation. Rome, IPPC, FAO. Available at https://www.ippc.int/en/publications/84230/ (last accessed 15 May 2017).	**United States of America** The SC should discuss whether it is appropriate to reference this in a standard. See United States comment on paragraph 47. *Category : SUBSTANTIVE*
105	40	This standard ~~provides a description~~ describes of the main types of fumigation treatment and provides guidance on the main operational requirements needed in order to ensure that ~~the treatments~~ they are applied effectively, consistently and in a manner that minimizes economic and environmental impacts.	**Costa Rica** Changes suggested for consistency and clarify *Category : EDITORIAL*
106	40	This standard ~~provides a description of~~ describes the main types of fumigation treatments and provides guidance on the main operational requirements needed in order to ensure that ~~the treatments~~ they are applied effectively, consistently and in a manner that minimizes economic and environmental impacts.	**COSAVE** Changes suggested for consistency with other adopted ISPMs. The term "fumigation treatment" should be used for consistency, because Annexes to ISPM 28 refer to "fumigation treatments" for specific pests. *Category : EDITORIAL*
107	40	This standard ~~provides a description of~~ describes the main types of fumigation treatment and provides guidance on the main operational requirements needed in order to ensure that ~~the treatments~~ they are applied effectively, consistently and in a manner that minimizes economic and environmental impacts.	**Peru** Changes suggested for consistency *Category : EDITORIAL*
108	40	This standard ~~provides a description of~~ describes the main types of fumigation treatments and provides guidance on the main operational requirements needed in order to ensure that ~~the treatments~~ they are applied effectively, consistently and in a manner that minimizes economic and environmental impacts.	**Argentina** Changes suggested for consistency with other adopted ISPMs. The term "fumigation treatment" should be used for consistency, because Annexes to ISPM 28 refer to "fumigation treatments" for specific pests. *Category : EDITORIAL*
109	40	This standard ~~provides a description~~ describes of the main types of fumigation and provides guidance on the main operational requirements needed in order to ensure that ~~the treatments~~ they are applied effectively, consistently and in a manner that minimizes economic and environmental	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 19:10 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*

#	Para	Text	Comment
		impacts.	
110	40	This standard ~~provides a description~~ describes of the main types of fumigation and provides guidance on the main operational requirements needed in order to ensure that ~~the treatments~~ they are applied effectively, consistently and in a manner that minimizes economic and environmental impacts.	**IPPC Regional Workshop Latin America** For consistency with others adopted ISPM *Category : TECHNICAL*
111	40	This standard ~~provides a description of~~ describes the main types of fumigation treatments and provides guidance on the main operational requirements needed in order to ensure that ~~the treatments~~ they are applied effectively, consistently and in a manner that minimizes economic and environmental impacts.	**Brazil** Changes suggested for consistency with other adopted ISPMs. The term "fumigation treatment" should be used for consistency, because Annexes to ISPM 28 refer to "fumigation treatments" for specific pests. *Category : EDITORIAL*
112	40	~~This standard provides a description of the main types of fumigation and provides guidance on the main operational requirements needed in order to~~ NPPOs should ensure that the ~~treatments are applied effectively, consistently and in a manner~~ fumigation application is carried out effectively so that ~~minimizes economic~~ scheduled parameters are attained at the required level throughout the commodity for the required duration and ~~environmental impacts.~~at required temperature.	**EPPO** For consistency with other ISPMs and the IPPC Style Guide, the Outline of requirements should briefly refer, in a condensed form, to the main requirements of the standard. It is noted that the original outline from the EWG in that respect was correct whilst the current text from SC has taken the form of an extended scope. *Category : TECHNICAL*
113	40	~~This standard provides a description of the main types of fumigation and provides guidance on the main operational requirements needed in order to~~ NPPOs should ensure that the ~~treatments are applied effectively, consistently and in a manner~~ fumigation application is carried out effectively so that ~~minimizes economic~~ scheduled parameters are attained at the required level throughout the commodity for the required duration and ~~environmental impacts~~at required temperature.	**European Union** For consistency with other ISPMs and the IPPC Style Guide, the 'Outline of requirements' should briefly refer, in a condensed form, to the main requirements of the standard. It is noted that the original outline from the EWG in that respect was correct whilst the current text from SC has taken the form of an extended scope. *Category : TECHNICAL*
114	40	This standard ~~provides a description of~~ describes the main types of fumigation treatments and provides guidance on the main operational requirements needed in order to ensure that ~~the treatments~~ they are applied effectively, consistently and in a manner that minimizes economic and environmental impacts.	**Uruguay** Changes suggested for consistency with other adopted ISPMs. The term "fumigation treatment" should be used for consistency, because Annexes to ISPM 28 refer to "fumigation treatments" for specific pests. *Category : EDITORIAL*

#	Para	Text	Comment
115	40	La presente NIMF proporciona una descripción de los principales tipos de fumigación y ofrece orientación sobre los principales requisitos operativos necesarios para garantizar que los tratamientos se apliquen de forma eficaz, sistemática y ~~con efectos mínimos sobre la economía y~~ de forma que minimice el ~~medio ambiente~~impacto económico y ambiental.	**Panama** Para hacer concordancia con el ámbito general de la presente norma. *Category : EDITORIAL*
116	40	La presente NIMF proporciona una descripción de los principales tipos de fumigación y ofrece orientación sobre los principales requisitos operativos necesarios para garantizar que los tratamientos se apliquen de forma eficaz, sistemática y ~~con efectos mínimos sobre la economía y~~ de forma que minimice el ~~medio ambiente~~impacto económico y ambiental.	**OIRSA** Para hacer concordancia con el ámbito general de la presente norma. *Category : EDITORIAL*
117	41	The standard describes how fumigation tretament should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated ~~pests of concern~~pests. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation treatment as a phytosanitary measure.	**Peru** "Of concern" deleted because is redundant. The term "fumigation treatment" should be used for consistency, because Annexes to ISPM 28 refer to fumigation treatments for specific pests. *Category : TECHNICAL*
118	41	The standard describes how fumigation treatments should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated ~~pests of concern~~pests. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation treatments as a phytosanitary measure.	**Argentina** "Of concern" deleted because is redundant. The term "fumigation treatment" should be used for consistency, because Annexes to ISPM 28 refer to fumigation treatments for specific pests. *Category : TECHNICAL*
119	41	The standard describes how fumigation should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated pests ~~of concern~~. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation as a phytosanitary measure.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 19:11 Accepted from IPPC Regional Workshop LA. *Category : EDITORIAL*
120	41	The standard describes how fumigation should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated pests ~~of concern~~. This standard also provides	**IPPC Regional Workshop Latin America** "of concern" deleted, because it is redundant. *Category : EDITORIAL*

#	Para	Text	Comment
		guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation as a phytosanitary measure.	
121	41	The standard describes how fumigation treatments should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated ~~pests of concern~~pests. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation treatments as a phytosanitary measure.	**Brazil** "Of concern" deleted because is redundant. The term "fumigation treatment" should be used for consistency, because Annexes to ISPM 28 refer to fumigation treatments for specific pests. *Category : TECHNICAL*
122	41	~~The standard describes how fumigation should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated pests of concern. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation as a phytosanitary measure.~~ The NPPO of the country in which the fumigation is conducted or initiated is responsible for the evaluation, approval and monitoring of the application of fumigation as a phytosanitary measure	**EPPO** As for the previous paragraph, the text continues with another main requirement. *Category : TECHNICAL*
123	41	The standard describes how fumigation should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated pests of concern. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation as a phytosanitary measure.	**Ghana** Agree with the addition of "Fumigation Entities" by the SC *Category : TECHNICAL*
124	41	~~The standard describes how fumigation should be carried out to~~ The NPPO of the country in which the fumigation is conducted or initiated is responsible for the evaluation, approval and monitoring of the application of fumigation as a phytosanitary measure. ~~achieve the stated efficacy as given in ISPM 28 for the regulated pests of concern. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation as a phytosanitary measure.~~	**European Union** As for the previous paragraph, the text continues with another main requirement. *Category : TECHNICAL*
125	41	The standard describes how fumigation treatments should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated ~~pests of concern~~pests. This	**Uruguay** "Of concern" deleted because is redundant. The term "fumigation treatment" should be used for consistency, because Annexes to ISPM 28 refer to fumigation treatments for specific pests.

#	Para	Text	Comment
		standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation treatments as a phytosanitary measure.	*Category : TECHNICAL*
126	41	The standard describes how fumigation should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated pests of concern. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation as a phytosanitary measure~~.~~. The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.	**Azerbaijan** *Category : EDITORIAL*
127	41	The standard describes how fumigation should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated pests of concern. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation as a phytosanitary measure.	**Palau** define fumigation entities *Category : TRANSLATION*
128	41	~~The~~ This standard describes how fumigation should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated pests of concern. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation as a phytosanitary measure.	**Palau** *Category : EDITORIAL*
129	41	The standard describes how fumigation treatments should be carried out to achieve the stated efficacy as given in ISPM 28 for the regulated ~~pests of concern~~pests. This standard also provides guidance for NPPOs on the procedural requirements for fumigation entities authorized to perform fumigation treatments as a phytosanitary measure.	**COSAVE** The term "fumigation treatment" should be used for consistency, because ISPM 28 refers to "fumigation treatments" for specific pests. "of concern" deleted, because it is redundant. *Category : TECHNICAL*
130	41	La norma describe el modo en que debe realizarse la fumigación para lograr la eficacia indicada según consta en la NIMF 28 para las plagas reglamentadas de interés. Esta	**Panama** Mejor comprensión y hacer concordancia con el ámbito de la norma. *Category : EDITORIAL*

#	Para	Text	Comment
		norma proporciona asimismo orientación a las ONPF sobre los requisitos relativos al procedimiento que deben seguir las entidades fumigadoras ~~autorizadas a aplicar la fumigación como medida fitosanitaria~~autorizadas.	
131	41	La norma describe el modo en que debe realizarse la fumigación para lograr la eficacia indicada según consta en la NIMF 28 para las plagas reglamentadas de interés. Esta norma proporciona asimismo orientación a las ONPF sobre los requisitos relativos al procedimiento que deben seguir las entidades fumigadoras ~~autorizadas a aplicar la fumigación como medida fitosanitaria~~autorizadas.	**OIRSA** Mejor comprensión y hacer concordancia con el ámbito de la norma. *Category : EDITORIAL*
132	43	The purpose of this standard is to provide generic requirements for the application of phytosanitary fumigation treatments, specifically those adopted under ISPM 28 (Phytosanitary treatments for regulated pests). ISPM 28 was adopted to harmonize effective phytosanitary treatments over a wide range of circumstances and to enhance the mutual recognition of treatment efficacy by NPPOs, which may facilitate trade. ISPM 28 provides requirements for submission and evaluation of efficacy data and other relevant information on phytosanitary treatments, and Annexes with specific fumigation treatments that have been evaluated and adopted by the Commission on Phytosanitary Measures Fumigation is a ~~form~~ type of treatment in which a ~~toxic gas~~ chemical ina a gaseous form (a fumugant) is applied to a commodity to kill ~~a sufficient proportion of~~ the target pests ~~and may be used in pest management~~at a stated efficacy.	**Costa Rica** Cambio revisado por IPPC Regional Workshop Latin America el 27 sep. 2017 21:39 Accepted from IPPC Regional Workshop LA *Category : TECHNICAL*
133	43	The purpose of this standard is to provide generic requirements for the application of phytosanitary fumigation treatments, specifically those adopted under ISPM 28 (Phytosanitary treatments for regulated pests). ISPM 28 was adopted to harmonize effective phytosanitary treatments over a wide range of circumstances and to enhance the mutual recognition of treatment efficacy by NPPOs, which may facilitate trade. ISPM 28 provides requirements for submission and evaluation of efficacy data and other relevant information	**IPPC Regional Workshop Latin America** Text added to be aligned to Temperature treatment draft - "Toxic gas" was changed for consistency with the Scope of this standard. - the objetive of the treatment is to kill the pest at a stated efficacy. A "sufficient proportion of pest killed" is ambiguos. - the use of the treatment for "pest management" is not relevant in this standard which provide guidances for the use of fumigation treatments as phytosanitary measures. *Category : TECHNICAL*

#	Para	Text	Comment
		on phytosanitary treatments, and Annexes with specific fumigation treatments that have been evaluated and adopted by the Commission on Phytosanitary Measures Fumigation is a ~~form~~ type of treatment in which a ~~toxic gas~~ chemical ina a gaseous form (a fumugant) is applied to a commodity to kill ~~a sufficient proportion of~~ the target pests ~~and may be used in pest management~~at a stated efficacy.	
134	43	Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill a sufficient proportion of the target pests and may be used in pest management.	**IPPC Regional Workshop Asia** Retain as it is. **APPPC** agreed by APPPC **Bangladesh** Bangladesh agree with APPPC comment. **Nepal** Support to Regional Comment **Viet Nam** Vietnam agreed with APPPC comment. **Nepal** Support to Regional Comment *Category : EDITORIAL*
135	43	Fumigation treatment is a ~~form~~ type of treatment in which a ~~toxic gas~~ chemical in a gaseous form (a fumigant) is applied to a commodity to kill ~~a sufficient proportion of~~ the target pests ~~and may be used in pest management~~at a stated efficacy.	**COSAVE** -"Toxic gas" was changed by "chemical in a gaseous form" for consistency with the scope of this standard. Last part of the sentence changed because the objective of the treatment is to kill the target pest at a stated efficacy. A "sufficient proportion of pest killed" is ambigous. The use of the treatment for pest management is not relevant in this standard which provides guidance for the use of fumigation treatments as phytosanitary measures. *Category : TECHNICAL*
136	43	The purpose of this standard is to provide generic requirements for the application of phytosanitary fumigation treatments, specifically those adopted under ISPM 28 (Phytosanitary treatments for regulated pests). ISPM 28 was adopted to harmonize effective phytosanitary treatments over a wide range of circumstances and to enhance the mutual recognition of treatment efficacy by NPPOs, which may facilitate trade. ISPM 28 provides requirements for submission and evaluation of efficacy data and other relevant information on phytosanitary treatments, and Annexes with specific fumigation treatments that have been evaluated and adopted by the Commission on Phytosanitary Measures	**COSAVE** Text added to align with draft ISPM on temperature treatments *Category : TECHNICAL*

#	Para	Text	Comment
		Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill a sufficient proportion of the target pests and may be used in pest management.	
137	43	The purpose of this standard is to provide generic requirements for the application of phytosanitary fumigation treatments, specifically those adopted under ISPM 28 (Phytosanitary treatments for regulated pests). ISPM 28 was adopted to harmonize effective phytosanitary treatments over a wide range of circumstances and to enhance the mutual recognition of treatment efficacy by NPPOs, which may facilitate trade. ISPM 28 provides requirements for submission and evaluation of efficacy data and other relevant information on phytosanitary treatments, and Annexes with specific fumigation treatments that have been evaluated and adopted by the Commission on Phytosanitary Measures. Fumigation is a ~~form~~ type of treatment in which a ~~toxic gas~~ chemical in a gaseous form(fumigant) is applied to a commodity to kill ~~a sufficient proportion of~~ the target pests ~~and may be used in pest management~~at a started efficacy.	**Peru** Text added to align with draft ISPM on temperature treatments Toxic gas" was changed by "chemical in a gaseous form" for consistency with the scope of this standard. Last part of the sentence changed because the objective of the treatment is to kill the target pest at a stated efficacy. A "sufficient proportion of pest killed" is ambigous. The use of the treatment for pest management is not relevant in this standard which provides guidance for the use of fumigation treatments as phytosanitary measures. *Category : TECHNICAL*
138	43	Fumigation is a form of treatment in which a toxic gas is applied to a commodity or structure to kill a sufficient proportion of the target pests and may be used in pest management.	**Ozone Secretariat** This is a sentence of general knowledge. Structure fumigation is conducted in such as fumigation of residential house (e.g. to kill invaded Khapra beetle) as an emergency treatment of plant quarantine. *Category : SUBSTANTIVE*
139	43	Fumigation is a ~~form~~ type of treatment in which a ~~toxic gas~~ chemical in a gaseous form (a fumigant) is applied to a commodity to kill ~~a sufficient proportion of~~ the target pests ~~and may be used in pest management~~at a stated efficacy.	**Argentina** "Toxic gas" was changed by "chemical in a gaseous form" for consistency with the scope of this standard. Last part of the sentence changed because the objective of the treatment is to kill the target pest at a stated efficacy. A "sufficient proportion of pest killed" is ambigous. The use of the treatment for pest management is not relevant in this standard which provides guidance for the use of fumigation treatments as phytosanitary measures. *Category : TECHNICAL*
140	43	The purpose of this standard is to provide generic requirements for the application of phytosanitary fumigation treatments, specifically those adopted under ISPM 28 (Phytosanitary treatments for regulated pests). ISPM 28 was adopted to harmonize effective phytosanitary treatments over a wide range of circumstances and to	**Argentina** Text added to align with draft ISPM on temperature treatments *Category : TECHNICAL*

#	Para	Text	Comment
		enhance the mutual recognition of treatment efficacy by NPPOs, which may facilitate trade. ISPM 28 provides requirements for submission and evaluation of efficacy data and other relevant information on phytosanitary treatments, and Annexes with specific fumigation treatments that have been evaluated and adopted by the Commission on Phytosanitary Measures. Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill a sufficient proportion of the target pests and may be used in pest management.	
141	43	The purpose of this standard is to provide generic requirements for the application of phytosanitary fumigation treatments, specifically those adopted under ISPM 28 (Phytosanitary treatments for regulated pests). ISPM 28 was adopted to harmonize effective phytosanitary treatments over a wide range of circumstances and to enhance the mutual recognition of treatment efficacy by NPPOs, which may facilitate trade. ISPM 28 provides requirements for submission and evaluation of efficacy data and other relevant information on phytosanitary treatments, and Annexes with specific fumigation treatments that have been evaluated and adopted by the Commission on Phytosanitary Measures Fumigation is a ~~form~~ type of treatment in which a ~~toxic gas~~ chemical ina a gaseous form (a fumugant) is applied to a commodity to kill ~~a sufficient proportion of~~ the target pests ~~and may be used in pest management~~at a stated efficacy.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 19:25 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
142	43	~~Fumigation is a form~~ The purpose of ~~treatment in which a toxic gas~~ this standard is ~~applied~~ to ~~a commodity to kill a sufficient proportion of~~ provide generic requirements for the ~~target pests and may be used in pest management.~~application of phytosanitary fumigation treatments, specifically those adopted under ISPM 28 (Phytosanitary treatments for regulated pests) ISPM 28 was adopted to harmonize effective phytosanitary treatments over a wide range of circumstances and to enhance the mutual recognition of treatment efficacy by NPPOs, which may facilitate trade.	**Brazil** Text added to align with draft ISPM on temperature treatments. "Toxic gas" was changed for consistency with the Scope of this standard. - the objetive of the treatment is to kill the pest at a stated efficacy. A "sufficient proportion of pest killed" is ambiguos. - the use of the treatment for "pest management" is not relevant in this standard which provide guidances for the use of fumigation treatments as phytosanitary measures. *Category : TECHNICAL*

#	Para	Text	Comment
		ISPM 28 provides requirements for submission and evaluation of efficacy data and other relevant information on phytosanitary treatments, and Annexes with specific fumigation treatments that have been evaluated and adopted by the Commission on Phytosanitary Measures. Fumigation treatment is a type of treatment in which a chemical in a gaseous form (a fumigant) is applied to a commodity to kill the target pests at a stated efficacy.	
143	43	Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill a ~~sufficient~~ required proportion of the target pests and may be used in pest management.	**EPPO** to improve clarity *Category : TECHNICAL*
144	43	Fumigation is a ~~form of treatment~~ process in which a toxic gas is ~~applied to~~ released by a trained personnel using specialized equipment/method into an air tight enclosure of a commodity to ~~kill a sufficient proportion of the target pests and may be used in pest management~~eliminate associated pest.	**India** *Category : SUBSTANTIVE*
145	43	Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill a sufficient proportion of the target pests and may be used in pest management.	**Kenya** Sufficient` implies that there is likelihood some pests would remain in the consignment after treatment; thereby not guaranteeing absence of pests after treatment rendering the treatment no appropriate *Category : SUBSTANTIVE*
146	43	Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill a ~~sufficient~~ required proportion of the target pests and may be used in pest management.	**European Union** To improve clarity. *Category : TECHNICAL*
147	43	The purpose of this standard is to provide generic requirements for the application of phytosanitary fumigation treatments, specifically those adopted under ISPM 28 (Phytosanitary treatments for regulated pests) ISPM 28 was adopted to harmonize effective phytosanitary treatments over a wide range of circumstances and to enhance the mutual recognition of treatment efficacy by NPPOs, which may facilitate trade.	**Uruguay** Text added to align with draft ISPM on temperature treatments *Category : TECHNICAL*

#	Para	Text	Comment
		ISPM 28 provides requirements for submission and evaluation of efficacy data and other relevant information on phytosanitary treatments, and Annexes with specific fumigation treatments that have been evaluated and adopted by the Commission on Phytosanitary Measures. Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill a sufficient proportion of the target pests and may be used in pest management.	
148	43	Fumigation is a ~~form~~ type of treatment in which a ~~toxic gas~~ chemical in a gaseous form (a fumigant) is applied to a commodity to kill ~~a sufficient proportion of~~ the target pests ~~and may be used in pest management~~at a stated efficacy.	**Uruguay** "Toxic gas" was changed by "chemical in a gaseous form" for consistency with the scope of this standard. Last part of the sentence changed because the objective of the treatment is to kill the target pest at a stated efficacy. A "sufficient proportion of pest killed" is ambigous. The use of the treatment for pest management is not relevant in this standard which provides guidance for the use of fumigation treatments as phytosanitary measures. *Category : TECHNICAL*
149	43	Fumigation is a form of treatment in which a ~~toxic gas~~ chemical is applied in a gaseous form to a commodity to ~~kill~~ eliminate a ~~sufficient proportion of~~ regulated pest to a threshold level thereby hindering the ~~target pests~~ successful establishment of such pest in an environment it enters in association with a regulated article and may be used in pest management.	**Sri Lanka** *Category : SUBSTANTIVE*
150	43	Fumigation is a form of treatment in which a toxic gas is applied to a commodity to ~~kill a sufficient proportion~~ achieve required level of ~~the~~ target ~~pests~~ pest mortality and may be used in pest management.	**Korea, Republic of** *Category : TECHNICAL*
151	43	Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill a sufficient proportion of the target pests and may be used in pest management. Indonesia proposes new sentence as follow: Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill the target pests.	**Indonesia** *Category : SUBSTANTIVE*
152	43	Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill a sufficient proportion of the target pests and may be used in pest management.	**Micronesia** Delete "a sufficient proportion of" *Category : SUBSTANTIVE*
153	43	Fumigation is a form of treatment in which a toxic gas is	**PPPO**

#	Para	Text	Comment
		applied to a commodity to kill a sufficient proportion of the target pests and may be used in pest management.	clarity on the word specified levels? of pest mortality, nothing as such in the appendix. what exactly they referring to. substitute word specified with required levels? *Category : SUBSTANTIVE*
154	43	Fumigation is a form of treatment in which a toxic gas is applied to a commodity to ~~kill a sufficient proportion of the~~ kill target pests and may be used in pest management.	**PPPO** not happy with the word sufficient proportion to be taken out and removed *Category : SUBSTANTIVE*
155	43	Fumigation is a form of treatment in which a toxic gas is applied to a commodity to kill a sufficient proportion of the target pests and may be used in pest management.	**Nepal** Does it mean that sufficient proportion refers to 100 percent (in the context of quarantine) or killing hundred percent may not be required. *Category : EDITORIAL*
156	43	~~La fumigación es un tipo de tratamiento que consiste en aplicar un gas tóxico a un producto para matar una proporción suficiente de las plagas objetivo y podrá utilizarse para el control de plagas.~~La fumigación es un tipo de tratamiento que consiste en aplicar un gas químico en forma gaseosa (un fumigante) a un producto para matar las plagas objeto a una eficacia declarada. El propósito de esta norma es proporcionar requisitos genéricos para la aplicación de tratamientos de fumigación fitosanitarios, específicamente los adoptados bajo la NIMF 28 (Tratamientos fitosanitarios para plagas reglamentadas). La NIMF 28 fue adoptada para armonizar tratamientos fitosanitarios efectivos en una amplia gama de circunstancias y para mejorar el reconocimiento mutuo de la eficacia del tratamiento por las ONPF, lo cual puede facilitar el comercio. La NIMF 28 establece requisitos para la presentación y evaluación de datos sobre la eficacia y otra información pertinente sobre tratamientos fitosanitarios y Anexos con tratamientos específicos de fumigación que han sido evaluados y adoptados por la Comisión de Medidas Fitosanitarias	**Colombia** Texto añadido para alinearse con Tratamiento de temperatura *Category : TECHNICAL*
157	43	~~La fumigación es un tipo de tratamiento que consiste en aplicar un gas tóxico a un producto para matar una proporción suficiente de las plagas objetivo y podrá utilizarse para el control de plagas.~~	**Panama** El párrafo da más sentido a una definición que un antecedente y la definición de "Fumigación" ya está contemplada en la NIMF No. 5. *Category : SUBSTANTIVE*
158	43	~~La fumigación es un tipo de tratamiento que consiste en~~	**OIRSA** El párrafo da más sentido a una definición que un antecedente y la definición de

#	Para	Text	Comment
		~~aplicar un gas tóxico a un producto para matar una proporción suficiente de las plagas objetivo y podrá utilizarse para el control de plagas.~~	"Fumigación" ya está contemplada en la NIMF No. 5. *Category : SUBSTANTIVE*
159	43	La fumigation est une forme de traitement consistant à appliquer un gaz toxique à une marchandise afin de tuer une proportion suffisante des organismes nuisibles visés; cette technique peut constituer un outil de lutte contre les organismes nuisibles.	**Cameroon** may be used in pest "management" devrait etre traduit "gestion" ou "controle" *Category : TRANSLATION*
160	44	~~The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests.~~	**Costa Rica** Cambio revisado por IPPC Regional Workshop Latin America el 27 sep. 2017 21:40 *Category : SUBSTANTIVE*
161	44	~~The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests.~~	**IPPC Regional Workshop Latin America** Text deleted because is not necessary. *Category : SUBSTANTIVE*
162	44	~~The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests.~~	**Peru** Deleted because i´snt necessary. *Category : TECHNICAL*
163	44	~~The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests.~~	**Argentina** Text deleted because is not necessary. *Category : SUBSTANTIVE*
164	44	~~The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 19:22 Accepted from IPPC Regional Workshop LA.

#	Para	Text	Comment
		~~of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests.~~	*Category : SUBSTANTIVE*
165	44	~~The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests.~~	**Brazil** Text deleted because is not necessary *Category : SUBSTANTIVE*
166	44	The ~~purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The~~ requirement for, or application of, phytosanitary treatments to regulated articles ~~is a phytosanitary measure~~ may be used by contracting ~~parties~~ parties as a phytosanitary measure to prevent the introduction and spread of regulated pests.	**EPPO** Quoting the purpose of IPPC seems unnecessary, as it is commonplace and not particular for this ISPM. 'Fumigation may be used' is more 'operational than 'is used' *Category : EDITORIAL*
167	44	The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests.	**United States of America** This language is not in the Temperature Treatments draft ISPM. Therefore, suggest being consistent across the two drafts. *Category : SUBSTANTIVE*
168	44	The ~~purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The~~ requirement for, or application of, phytosanitary treatments to regulated articles ~~is a phytosanitary measure~~ may be used by contracting parties as a phytosanitary measure to prevent the introduction and spread of regulated pests.	**European Union** Quoting the purpose of IPPC seems unnecessary, as it is commonplace and not particular for this ISPM. 'Fumigation may be used' is more operational than 'is used' *Category : EDITORIAL*
169	44	~~The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1~~	**Uruguay** Text deleted because is not necessary *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests.~~	
170	44	The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests. Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (Phytosanitary treatments for regulated pests).	**Korea, Republic of** Add the last sentence which was originally included in Scope in para 32. *Category : EDITORIAL*
171	44	The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests. Requirements of temperature, dosage, duration, minimum concentration readings at time intervals, and other essential aspects for effective fumigation are covered in ISPM 28 (Phytosanitary treatments for regulated pests).	**Thailand** *Category : EDITORIAL*
172	44	~~The purpose of the IPPC is "to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control" (Article I.1 of the IPPC). The requirement for, or application of, phytosanitary treatments to regulated articles is a phytosanitary measure used by contracting parties to prevent the introduction and spread of regulated pests.~~	**COSAVE** Text deleted because is not necessary. *Category : SUBSTANTIVE*
173	44	La finalidad de la CIPF es "prevenir la diseminación e introducción de plagas de plantas y productos vegetales y promover medidas apropiadas para combatirlas" (Artículo I.1 de la CIPF). ~~El requisito o la aplicación de~~ Los	**Panama** Clarificar el texto, y el uso de la palabra "entrada" es consistente con la NIMF No. 5 *Category : EDITORIAL*

#	Para	Text	Comment
		tratamientos fitosanitarios como requisitos o sus aplicación a los artículos reglamentados es una medida fitosanitaria que usan las partes contratantes para prevenir la ~~introducción~~ entrada y dispersión de plagas reglamentadas.	
174	44	La finalidad de la CIPF es "prevenir la diseminación e introducción de plagas de plantas y productos vegetales y promover medidas apropiadas para combatirlas" (Artículo I.1 de la CIPF). ~~El requisito o la aplicación de~~ Los tratamientos fitosanitarios como requisitos o su aplicación a los artículos reglamentados es una medida fitosanitaria que usan las partes contratantes para prevenir la ~~introducción~~ entrada y dispersión de plagas reglamentadas.	**OIRSA** Clarificar el texto, y el uso de la palabra "entrada" es consistente con la NIMF No. 5 *Category : EDITORIAL*
175	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.~~	**Costa Rica** Cambio revisado por IPPC Regional Workshop Latin America el 27 sep. 2017 21:41 *Category : SUBSTANTIVE*
176	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.~~	**IPPC Regional Workshop Latin America** Text deleted because is just just mentioned in the Scope (para. 33) *Category : SUBSTANTIVE*
177	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.~~	**Peru** Deleted because is not necessary. *Category : TECHNICAL*
178	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.~~	**Argentina** Text deleted because is just just mentioned in the Scope (para. 33) *Category : TECHNICAL*
179	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 19:23 Accepted from IPPC Regional Workshop LA. *Category : SUBSTANTIVE*
180	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.~~	**Brazil** Text deleted because it is mentioned in the scope (paragraph 33) *Category : TECHNICAL*
181	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.~~	**EPPO** Sentence moved to the end of the scope where it is better located. *Category : SUBSTANTIVE*
182	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not~~	**European Union** Sentence moved to the end of the scope where it is better located. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~considered to be a fumigation treatment.~~	
183	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.~~	**Uruguay** Text deleted because it is mentioned in the scope (paragraph 33) *Category : TECHNICAL*
184	45	The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment, however fumigation treatments can be supplemented by atmospheric modifications.	**Australia** As referred to in 4.2.2.1 *Category : SUBSTANTIVE*
185	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.~~	**Azerbaijan** *Category : EDITORIAL*
186	45	The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment. Indonesia would add the sentence after end of this para as follow: therefore, it will not be included in this guidance.	**Indonesia** *Category : SUBSTANTIVE*
187	45	~~The change in concentration of carbon dioxide and oxygen in air as used in modified atmosphere treatments is not considered to be a fumigation treatment.~~	**COSAVE** Text deleted because is just just mentioned in the Scope (para. 33) *Category : TECHNICAL*
188	45	~~La modificación de la concentración de dióxido de carbono y oxígeno del aire que se utiliza en los tratamientos en atmósfera modificada no se considera un tratamiento de fumigación~~.	**Colombia** Esta NIMF es específico para tratamientos de fumigación y este parámetro no es necesario. *Category : TECHNICAL*
189	45	~~La modificación de la concentración de dióxido de carbono y oxígeno del aire que se utiliza en los tratamientos en atmósfera modificada no se considera un tratamiento de fumigación.~~	**Panama** Este párrafo ya fue contemplado en el ámbito de aplicación de la presente norma. *Category : EDITORIAL*
190	45	~~La modificación de la concentración de dióxido de carbono y oxígeno del aire que se utiliza en los tratamientos en atmósfera modificada no se considera un tratamiento de fumigación.~~	**OIRSA** Este párrafo ya fue contemplado en el ámbito de aplicación de la presente norma *Category : TECHNICAL*
191	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and	**Antigua and Barbuda** The phrase "be toxic to people and" does not fit in with the intent of this paragraph. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people and~~ have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	
192	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target regulated pests into ~~a regulated~~ an area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people~~ have specific effects on human health and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**Costa Rica** -"target regulated pests" to clarify the use of fumigation treatment as a phytosanitary measure. -For consistency with others ISPM *Category : TECHNICAL*
193	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target regulated pests into ~~a regulated~~ an area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people~~ have specific effects on human health and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas.	**IPPC Regional Workshop Latin America** -"target regulated pests" to clarify the use of fumigation treatment as a phytosanitary measure. -For consistency with others ISPM *Category : TECHNICAL*

#	Para	Text	Comment
		The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	
194	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture or destruction (scrubbing) technology to reduce emissions.	**IPPC Regional Workshop Asia** to add in destruction (scrubbing) technology as an additional available technology to reduce emissions. **APPPC** agreed by APPPC **Viet Nam** Vietnam agreed with APPPC comment. **China** China agreed to this regional comments. **Thailand** Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. **Korea, Republic of** Republic of Korea agree with APPPC comment. **Japan** Japan support regional comment. *Category : SUBSTANTIVE*
195	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target regulated pests into ~~a regulated~~ an area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people~~ have specific effects on human health and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**COSAVE** Reference to "target regulated pests" is suggested to clarify the use of fumigation treatments as a phytosanitary measure. We suggest to change "toxic to people" by "specific effects on human health" for consistency with other ISPMs *Category : TECHNICAL*
196	47	Historically, fumigation has been widely applied to prevent	**Peru**

#	Para	Text	Comment
		the introduction and spread of target regulated pests into ~~a regulated~~ an area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, ~~may be toxic to people~~ may have a specific effects on human health and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	Reference to "target regulated pests" is suggested to clarify the use of fumigation treatments as a phytosanitary measure. We suggest to change "toxic to people" by "specific effects on human health" for consistency with other ISPMs *Category : TECHNICAL*
197	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture or destruction technology to reduce emissions.	**Ozone Secretariat** There is a technology of destruction in addition to that of recapture. A reuse of recaptured fumigant may be conceived from the word of "recapture". Destruction technology is generally known more cost effective than reuse of recaptured fumigant. *Category : SUBSTANTIVE*
198	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target regulated pests into ~~a regulated~~ an area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people~~ have specific effects on human health and have negative impacts on the environment. For example, the emission of methyl	**Argentina** Reference to "target regulated pests" is suggested to clarify the use of fumigation treatments as a phytosanitary measure. We suggest to change "toxic to people" by "specific effects on human health" for consistency with other ISPMs *Category : TECHNICAL*

#	Para	Text	Comment
		bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	
199	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through destruction of fumigants or the use of recapture technology to reduce emissions.	**Japan** It is known that destruction is better for use than recapture because recapturing methyl bromide is higher in cost. *Category : TECHNICAL*
200	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**Guyana** Suggest remove of reference to people in this section as it doesn't fit in the section in the context of impact on biodiversity and the environment. It is recommended that an opening sentence be added to section 5.2.9 indicating that most fumigants used, are toxic to humans *Category : SUBSTANTIVE*

#	Para	Text	Comment
201	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target regulated pests into ~~a regulated~~ an area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people~~ have specific effects on human health and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 19:28 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
202	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people and~~ - have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**Saint Vincent and The Grenadines** Remove the reference to people in this section as it doesn't fit in the section in the context of impact on biodiversity and the environment. It is recommended that an opening sentence be added to section 5.2.9 indicating that most fumigants used, are toxic to humans. *Category : SUBSTANTIVE*
203	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people and~~ have negative impacts on the environment. For example, the emission of methyl bromide	**Barbados** Suggest remove of reference to people in this section as it doesn't fit in the section in the context of impact on biodiversity and the environment. It is recommended that an opening sentence be added to section 5.2.9 indicating that most fumigants used, are toxic to humans. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	
204	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target regulated pests into ~~a regulated~~ an area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people~~ have specific effects on human health and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**Brazil** Reference to "target regulated pests" is suggested to clarify the use of fumigation treatments as a phytosanitary measure. We suggest to change "toxic to people" by "specific effects on human health" for consistency with other ISPMs *Category : TECHNICAL*
205	47	Historically, fumigation has been widely applied to prevent the introduction and spread of ~~target pests into a~~ regulated ~~area~~ pests and has, therefore, been beneficial to ~~biodiversity and the environment~~biodiversity. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. It encourages Contracting Parties to choose other fumigants, where possible. Environmental	**EPPO** More precise. Important to give a summary of the IPPC recommendation Change proposed to be more precise. Delete "and the environment" to reduce conflict with following sentence 'proportionally' is unclear (and unnecessary) here. If the intented meaning was 'proportionate' that would be a rather blunt and not appropriate, generalizing statement. *Category : TECHNICAL*

#	Para	Text	Comment
		impacts of fumigants can ~~be proportionally~~ be mitigated through the use of recapture technology to reduce gas emissions.	
206	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**Trinidad and Tobago** Suggest remove of reference to people in this section as it doesn't fit in the section in the context of impact on biodiversity and the environment. It is recommended that an opening sentence be added to section 5.2.9 indicating that most fumigants used, are toxic to humans. *Category : SUBSTANTIVE*
207	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. ~~The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.~~	**United States of America** Is it necessary to identify ozone and greenhouse concerns when this entire document is developing a treatment? Additionally, the last two sentences are not related to the phytosanitary treatments to kill pests of plants. *Category : SUBSTANTIVE*
208	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate,	**European Union** 'proportionally' is unclear (and unnecessary) here. If the intended meaning was 'proportionate' that would be a rather blunt and not appropriate generalizing statement. *Category : TECHNICAL*

#	Para	Text	Comment
		may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be ~~proportionally~~ mitigated through the use of recapture technology to reduce emissions.	
209	47	Historically, fumigation has been widely applied to prevent the introduction and spread of ~~target pests into a~~ regulated ~~area~~ pests and has, therefore, been beneficial to ~~biodiversity and the environment~~biodiversity. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**European Union** Change proposed to be more precise. Delete "and the environment" to reduce conflict with the following sentence. *Category : TECHNICAL*
210	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be	**European Union** More precise. *Category : EDITORIAL*

#	Para	Text	Comment
		proportionally mitigated through the use of recapture technology to reduce gas emissions.	
211	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. It encourages Contracting Parties to choose other fumigants, where possible. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**European Union** Important to give a summary of the IPPC recommendation. *Category : TECHNICAL*
212	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target regulated pests into ~~a regulated~~ an area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people~~ have specific effects on human health and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**Uruguay** Reference to "target regulated pests" is suggested to clarify the use of fumigation treatments as a phytosanitary measure. We suggest to change "toxic to people" by "specific effects on human health" for consistency with other ISPMs *Category : TECHNICAL*
213	47	~~Historically, fumigation~~ Fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated ~~area and has~~area. However, ~~therefore~~fumigant gases, ~~been beneficial to biodiversity~~	**Australia** It is quite rare to mention about the beneficial of fumigation to biodiversity and environment. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		such as methyl bromide, sulphuryl fluoride, phosphine and ~~the environment~~ethyl format~~. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl format~~e, may be toxic to people and have negative impacts on the environment. ~~For example, the~~ The emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	
214	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**Jamaica** Suggest the removal to the reference of people in this section as it doesn't fit in the section in the context of impact on biodiversity and the environment. It is recommended that an opening sentence be added to section 5.2.9 indicating that most fumigants used, are toxic to humans. *Category : SUBSTANTIVE*
215	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may ~~be toxic to people and~~ have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of	**IPPC Regional Workshop Caribbean** Suggest remove of reference to people in this section as it doesn't fit in the section in the context of impact on biodiversity and the environment. It is recommended that an opening sentence be added to section 5.2.9 indicating that most fumigants used, are toxic to humans. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	
216	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture and scrubbing technology to reduce emissions.	**China** Emission reduction measures include 3 technologies such as recycling, scrubbing and reuse *Category : SUBSTANTIVE*
217	47	The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, may be toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. ~~The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue.~~ Environmental impacts of fumigants can be proportionally mitigated through the use of recapture	**IPPC Regional Workshop Near East** To emphasise that the recommendation of the IPPC is to replace the use of methyl bromide and to avoid confusion that the standard is addressing fumigation while the recommendation is to replace the use of certain fumigant. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		technology to reduce emissions.	
218	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, ~~may be~~ are toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**Vanuatu** *Category : EDITORIAL*
219	47	Historically, fumigation has been widely applied to prevent the introduction and spread of target pests into a regulated area and has, therefore, been beneficial to biodiversity and the environment. However, fumigant gases, such as methyl bromide, sulphuryl fluoride, phosphine and ethyl formate, ~~may be~~ is toxic to people and have negative impacts on the environment. For example, the emission of methyl bromide into the atmosphere is known to deplete the ozone layer and sulphuryl fluoride is a recognized greenhouse gas. The IPPC Recommendation on the replacement or reduction of the use of methyl bromide as a phytosanitary measure (CPM R-03, 2017) has been adopted in relation to this issue. Environmental impacts of fumigants can be proportionally mitigated through the use of recapture technology to reduce emissions.	**PPPO** Remove maybe toxic from the sentence *Category : EDITORIAL*
220	47	Históricamente, la fumigación se ha aplicado ampliamente para prevenir la introducción y la dispersión de plagas objetivo en un área reglamentada y, por tanto, ha sido beneficiosa para la biodiversidad y el medio ambiente. Sin embargo, los gases fumigantes, como el bromuro de metilo, el fluoruro de sulfurilo, el fosfano (fosfina) y el formiato de etilo, podrían ~~ser tóxicos para las personas y~~ tener efectos	**Colombia** Mejor redacción. *Category : EDITORIAL*

#	Para	Text	Comment
		negativos y nocivos para las personas y el medio ambiente. Por ejemplo, se sabe que la emisión de bromuro de metilo a la atmósfera agota la capa de ozono y el fluoruro de sulfurilo es un gas de efecto invernadero reconocido. En relación con esta cuestión se ha aprobado la recomendación de la CIPF relativa al reemplazo o reducción del uso de bromuro de metilo como medida fitosanitaria (CPM R-03, 2017). Las repercusiones medioambientales de los fumigantes pueden mitigarse de forma proporcional utilizando tecnología de recaptura para reducir las emisiones.	
221	47	Históricamente, la fumigación se ha aplicado ampliamente para prevenir la ~~introducción~~ entrada y la dispersión de plagas objetivo en un área reglamentada y, por tanto, ~~ha sido beneficiosa para~~ desde esta perspectiva protege la biodiversidad y el ~~medio~~ ambiente. Sin embargo, los gases fumigantes, como el bromuro de metilo, el fluoruro de sulfurilo, el fosfano (fosfina) y el formiato de etilo, podrían ser tóxicos para las personas y tener efectos nocivos para el medio ambiente. Por ejemplo, se sabe que la emisión de bromuro de metilo a la atmósfera agota la capa de ozono y el fluoruro de sulfurilo es un gas de efecto invernadero reconocido. En relación con esta cuestión se ha aprobado la recomendación de la CIPF relativa al reemplazo o reducción del uso de bromuro de metilo como medida fitosanitaria (CPM R-03, 2017). Las repercusiones medioambientales de los fumigantes pueden mitigarse de forma proporcional utilizando tecnología de recaptura para reducir las emisiones.	**Panama** Para ser consistente con la NIMF No. 5 y hacer una texto más comprensible *Category : EDITORIAL*
222	47	Históricamente, la fumigación se ha aplicado ampliamente para prevenir la ~~introducción~~ entrada y la dispersión de plagas objetivo en un área reglamentada y, por tanto, ~~ha sido beneficiosa para~~ desde esa perspectiva protege la biodiversidad y el ~~medio~~ ambiente. Sin embargo, los gases fumigantes, como el bromuro de metilo, el fluoruro de sulfurilo, el fosfano (fosfina) y el formiato de etilo, podrían ser tóxicos para las personas y tener efectos nocivos para el medio ambiente. Por ejemplo, se sabe que la emisión de	**OIRSA** Para ser consistente con la NIMF No. 5 y hacer una texto más comprensible *Category : TECHNICAL*

#	Para	Text	Comment
		bromuro de metilo a la atmósfera agota la capa de ozono y el fluoruro de sulfurilo es un gas de efecto invernadero reconocido. En relación con esta cuestión se ha aprobado la recomendación de la CIPF relativa al reemplazo o reducción del uso de bromuro de metilo como medida fitosanitaria (CPM R-03, 2017). Las repercusiones medioambientales de los fumigantes pueden mitigarse de forma proporcional utilizando tecnología de recaptura para reducir las emisiones.	
223	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**Costa Rica** Cambio revisado por IPPC Regional Workshop Latin America el 27 sep. 2017 21:47 *Category : TECHNICAL*
224	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**IPPC Regional Workshop Latin America** Text deleted because the purpose is described above and to avoid redundant *Category : TECHNICAL*
225	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**IPPC Regional Workshop Asia** This paragraph should be removed because it has already been described in section outline of requirements. **APPPC** agreed by APPPC **Viet Nam** Vietnam agreed with APPPC comment. **Korea, Republic of** Republic of Korea agree with APPPC comment. *Category : SUBSTANTIVE*
226	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**Peru** Text deleted because the purpose of this ISPM is described above, to avoid redundancy *Category : TECHNICAL*
227	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**Argentina** Text deleted because the purpose of this ISPM is described above, to avoid redundancy *Category : TECHNICAL*
228	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 19:30 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
229	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**Brazil** Text deleted because the purpose of this ISPM is described above, to avoid redundancy *Category : TECHNICAL*
230	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those~~	**EPPO** Superfluous repetition, cf. para 13.

#	Para	Text	Comment
		~~treatments adopted under ISPM 28.~~	The ref to ISPM 28 could be moved to Scope, cf earlier comment. *Category : EDITORIAL*
231	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**European Union** Superfluous repetition, cf. para 13. The reference to ISPM 28 could be moved to 'Scope', cf. earlier comment. *Category : EDITORIAL*
232	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**Uruguay** Text deleted because the purpose of this ISPM is described above, to avoid redundancy *Category : TECHNICAL*
233	49	The purpose of this ISPM is to provide requirements for the application of fumigation as an official phytosanitary ~~fumigation~~treatment, specifically those treatments adopted under ISPM 28.	**Australia** There is only sulfuryl fluoride listed in the annex so far. How will this ISPM relate to the Annex 1 in ISPM 15 as well as any specific fumigation requirements for trade between countries. *Category : EDITORIAL*
234	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**Singapore** Propose to delete this para 49 which is repeating what has been stated under Outline of Requirement in para 40 & 41. *Category : SUBSTANTIVE*
235	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**Thailand** This paragraph should be removed because it has already been described in section outline of requirements. *Category : SUBSTANTIVE*
236	49	~~The purpose of this ISPM is to provide requirements for the application of phytosanitary fumigation, specifically those treatments adopted under ISPM 28.~~	**COSAVE** Text deleted becuse the purpose is described above and to avoid redundant *Category : TECHNICAL*
237	49	~~La finalidad de la presente NIMF es proporcionar requisitos para la aplicación de la fumigación fitosanitaria, específicamente de los tratamientos aprobados en el marco de la NIMF 28.~~	**Colombia** De acuerdo con el taller regional el texto eliminado debido a que no es necesario. *Category : TECHNICAL*
238	50	**1. Fumigatio~~Treatment~~ Objective**	**Costa Rica** For consistency with the Tiltle, Scope and text of the ISPM. *Category : TECHNICAL*
239	50	**1. ~~Treatment~~ Fumigation Objective**	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 21:53 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
240	50	**1. ~~Treatment~~ Fumigation Objective**	**IPPC Regional Workshop Latin America** For consistency with the Tiltle, Scope and text of the ISPM. *Category : TECHNICAL*
241	50	**1~~.~~. Objetivo de la fumigación~~Objetivo de los tratamientos~~**	**Colombia** Para tener coherencia de acuerdo al titulo, alcance y texto de la NIMF *Category : TECHNICAL*

#	Para	Text	Comment
242	50	**1. Objetivo de ~~los tratamientos~~la fumigación**	**Panama** Para hacer concordancia con el título. *Category : TECHNICAL*
243	50	**1. Objetivo de ~~los tratamientos~~la fumigación**	**OIRSA** Para hacer concordante con el título. *Category : TECHNICAL*
244	51	The objective of using fumigation as a phytosanitary ~~measure, alone or in combination with another phytosanitary~~ measure is to ~~manage~~ achieve pest ~~risk by achieving a specified level of pest~~ mortality ~~(either immediately or eventually)~~at stated efficacy.	**Costa Rica** *Category : TECHNICAL*
245	51	The objective of using fumigation as a ~~phytosanitary measure, alone or in combination with another phytosanitary~~ phytosanitary measure is to ~~manage~~ achieve pest ~~risk by achieving a specified level of pest~~ mortality ~~(either immediately or eventually)~~at stated efficacy.	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
246	51	The objective of using fumigation treatment as a phytosanitary ~~measure, alone or in combination with another phytosanitary~~ measure is to ~~manage~~ achieve pest ~~risk by achieving a specified level of pest~~ mortality ~~(either immediately or eventually)~~at a stated efficacy.	**COSAVE** Section 1 should describe the main objective of the fumigation treatment, which is to achieve pest mortality at a specified efficacy. This ISPM provides requirements for the use of fumigation treatments as phytosanitary measures, therefore it is redundant to specify that they are to manage pest risk. *Category : TECHNICAL*
247	51	The objective of using fumigation treatment as a phytosanitary ~~measure, alone or in combination with another phytosanitary~~ measure is to ~~manage pest risk by achieving~~ archieve pest mortality at a ~~specified level of pest mortality (either immediately or eventually)~~started efficacy.	**Peru** Section 1 should describe the main objective of the fumigation treatment, which is to achieve pest mortality at a specified efficacy. This ISPM provides requirements for the use of fumigation treatments as phytosanitary measures, therefore it is redundant to specify that they are to manage pest risk. *Category : TECHNICAL*
248	51	The ~~objective~~ purpose of ~~using fumigation as a phytosanitary measure, alone or in combination with another phytosanitary measure~~ this ISPM is to ~~manage pest risk by achieving a specified level~~ provide requirements for the application of ~~pest mortality (either immediately or eventually)~~official phytosanitary fumigations.	**Ozone Secretariat** *Category : SUBSTANTIVE*
249	51	The objective of using fumigation as a phytosanitary measure, alone or in combination with another phytosanitary measure is to manage pest risk by achieving a specified level of pest mortality (either immediately or eventually).	**Ozone Secretariat** Proposed rewarding: "The purpose of this ISPM is to provide requirements for the application of official phytosanitary fumigations". There is only sulfuryl fluoride listed in the annex so far. How will this ISPM relate to the Annex 1 in ISPM 15 as well as any specific fumigation requirements for trade between countries?

#	Para	Text	Comment
			Category : SUBSTANTIVE
250	51	The objective of using fumigation treatment as a phytosanitary ~~measure, alone or in combination with another phytosanitary~~ measure measure is to ~~manage~~ achieve pest ~~risk by achieving a specified level of pest~~ mortality ~~(either immediately or eventually)~~at a stated efficacy.	**Argentina** Section 1 should describe the main objective of the fumigation treatment, which is to achieve pest mortality at a specified efficacy. This ISPM provides requirements for the use of fumigation treatments as phytosanitary measures, therefore it is redundant to specify that they are to manage pest risk. *Category : TECHNICAL*
251	51	The objective of using fumigation as a phytosanitary ~~measure, alone or in combination with another phytosanitary~~ measure is to ~~manage~~ achieve pest ~~risk by achieving a specified level of pest~~ mortality ~~(either immediately or eventually)~~at stated efficacy.	**CA** Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
252	51	The objective of using fumigation treatment as a phytosanitary ~~measure, alone or in combination with another phytosanitary~~ measure is to ~~manage~~ achieve pest ~~risk by achieving a specified level of pest~~ mortality ~~(either immediately or eventually)~~at a stated efficacy.	**Brazil** Section 1 should describe the main objective of the fumigation treatment, which is to achieve pest mortality at a specified efficacy. This ISPM provides requirements for the use of fumigation treatments as phytosanitary measures, therefore it is redundant to specify that they are to manage pest risk. *Category : TECHNICAL*
253	51	The objective of using fumigation as a phytosanitary measure, alone or in combination with another phytosanitary ~~measure~~ measure, is to ~~manage~~ achieve pest ~~risk by achieving a specified level of pest~~ mortality (either immediately or ~~eventually)~~eventually) at a specified efficacy. Appendix 1 provides guidance for fumigation efficacy studies.	**EPPO** For consistency with the draft standard on temperature treatments following first consultation (including for the last sentence which was moved from paragraph 62 of this standard). Easier to read with an additional comma. *Category : EDITORIAL*
254	51	The objective of using fumigation as a phytosanitary measure, alone or in combination with another phytosanitary measure is to manage pest risk by achieving a specified level of pest ~~mortality~~ mortality, as identified by the NPPO (either immediately or eventually).	**United States of America** To clarify *Category : EDITORIAL*
255	51	The objective of using fumigation as a phytosanitary measure, alone or in combination with another phytosanitary ~~measure~~ measure, is to manage pest risk by achieving a specified level of pest mortality (either immediately or eventually).	**European Union** Easier to read with an additional comma. *Category : EDITORIAL*
256	51	The objective of using fumigation as a phytosanitary measure, alone or in combination with another	**European Union** For consistency with the draft standard on temperature treatments following first consultation (including for the last sentence which was moved from paragraph 62 of this

#	Para	Text	Comment
		phytosanitary measure is to ~~manage~~ achieve pest ~~risk by achieving a specified level of pest~~ mortality (either immediately or ~~eventually)~~eventually) at a specified efficacy. Appendix 1 provides guidance for fumigation efficacy studies.	standard). *Category : SUBSTANTIVE*
257	51	The objective of using fumigation treatment as a phytosanitary ~~measure, alone or in combination with another phytosanitary~~ measure is to ~~manage~~ achieve pest ~~risk by achieving a specified level of pest~~ mortality ~~(either immediately or eventually)~~at a stated efficacy.	**Uruguay** Section 1 should describe the main objective of the fumigation treatment, which is to achieve pest mortality at a specified efficacy. This ISPM provides requirements for the use of fumigation treatments as phytosanitary measures, therefore it is redundant to specify that they are to manage pest risk. *Category : TECHNICAL*
258	51	The objective of using fumigation as a phytosanitary measure, alone or in combination with another phytosanitary measure is to manage pest risk by achieving a ~~specified~~ required level of pest mortality (either immediately or eventually).	**Korea, Republic of** *Category : EDITORIAL*
259	51	El objetivo ~~del uso~~ de utilizar la fumigación como medida ~~fitosanitaria, por sí sola o combinada con otra medida fitosanitaria,~~ fitosanitaria es ~~manejar el riesgo de plagas alcanzando un nivel de~~ lograr la mortalidad ~~especificado~~ de ~~una plaga (ya sea inmediatamente o~~ las plagas con ~~el tiempo).~~la eficacia declarada.	**Colombia** Se acepta lo aprobado en el Taller Regional. *Category : TECHNICAL*
260	52	**2. Fumigation ~~entities~~providers**	**Australia** The definition of providers as operators and facilities is confusing. The operator can be a company or individual and provides the service to apply the fumigant. The facility is where the fumigation is carried out and can be owned by an operator or a third party (i.e ships hold, sea container) . The treatment provider is the fumigator that carries out the fumigation. We would suggest that the terms above are used in the definition. Entity may be difficult for translation. This would require further changes throughout the document. *Category : TECHNICAL*
261	52	**2. Fumigation entities**	**Micronesia** to highlight NPPOs (to be accountable) as a fumigation provider. *Category : SUBSTANTIVE*
262	52	**2. Fumigation entities**	**PPPO** to include NPPOs (to be accountable) as one of the fumigation providers. *Category : SUBSTANTIVE*
263	52	**2. Fumigation entities**	**PPPO** reservations with the use of the word "Entity" forward in the paragraphs. Substitute with Fumgation providers?

#	Para	Text	Comment
			Category : SUBSTANTIVE
264	52	**2. Fumigation ~~entities~~Entities**	**Nepal** E *Category : EDITORIAL*
265	52	**2. Points de fumigation**	**Cameroon** Entités *Category : TRANSLATION*
266	53	Fumigation is undertaken by entities (e.g. fumigation companies or individuals) either in a fumigation facility or at other locations (e.g. cargo ship ~~hold)~~ hold, warehouses) (hereafter, fumigation facilities and fumigation operators are referred to as fumigation entities).	**IPPC Regional Workshop Asia** To include additional other locations e.g. warehouses. **APPPC** agreed by APPPC **Viet Nam** Vietnam agreed with APPPC comment. **Thailand** Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. *Category : SUBSTANTIVE*
267	53	Fumigation is undertaken by ~~entities~~ providers (e.g. fumigation companies or individuals) either in a ~~fumigation~~ facility or at other locations (e.g. cargo ship hold) (hereafter, fumigation facilities and fumigation operators are referred to as ~~fumigation entities)~~providers).	**Ozone Secretariat** The definition of providers as operators and facilities is confusing. The operator can be a company or individual and provides the service to apply the fumigant. The facility is where the funigation is carried out and can be owned by an operator or a third party (i.e ships hold, sea container) . The treatment provider is the fumigator that carries out the fumigation. We would suggest that the terms above are used in the definition. Entity may be difficult for translation. *Category : SUBSTANTIVE*
268	53	Fumigation is undertaken by entities (e.g. fumigation companies or individuals) either in a fumigation facility or at other locations (e.g. cargo ship hold) ~~(hereafter.~~ Hereafter, fumigation facilities and fumigation operators are referred to as fumigation ~~entities)~~entities.	**EPPO** *Category : EDITORIAL*
269	53	Fumigation is undertaken by ~~entities~~ Fumigation Operators (e.g. fumigation companies or individuals) either in a fumigation facility or at other designated locations (e.g. cargo ship ~~hold)~~ hold, go-downs, warehouses, container freight stations, container depots, etc) (hereafter, fumigation facilities and fumigation operators are referred to as fumigation entities).	**India** *Category : SUBSTANTIVE*
270	53	Fumigation is undertaken by entities (e.g. fumigation companies or individuals) either in a fumigation facility or at other locations (e.g. cargo ship ~~hold) (hereafter~~hold). Hereafter, fumigation facilities and fumigation operators are	**European Union** *Category : EDITORIAL*

#	Para	Text	Comment
		referred to as fumigation ~~entities)~~entities.	
271	53	Fumigation is undertaken by entities ~~(e.g. fumigation companies or individuals)~~ either in a fumigation facility or at other locations (e.g. cargo ship hold) (hereafter, fumigation facilities and fumigation operators are referred to as fumigation entities).	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*
272	53	Fumigation is undertaken by ~~entities~~ providers (e.g. fumigation companies or individuals) either in a ~~fumigation~~ facility or at other locations (e.g. cargo ship hold) (hereafter, fumigation facilities and fumigation operators are referred to as fumigation entities).	**Australia** The definition of providers as operators and facilities is confusing. The operator can be a company or individual and provides the service to apply the fumigant. The facility is where the fumigation is carried out and can be owned by an operator or a third party (i.e ships hold, sea container) . The treatment provider is the fumigator that carries out the fumigation. We would suggest that the terms above are used in the definition. Entity may be difficult for translation. This would require further changes throughout the document. *Category : TECHNICAL*
273	53	Fumigation is undertaken by entities (e.g. private sector fumigation treatment service providers - companies or individuals) either in a fumigation facility or at other locations (e.g. cargo ship hold) (hereafter, fumigation facilities and fumigation operators are referred to as fumigation entities).	**Sri Lanka** *Category : SUBSTANTIVE*
274	53	Fumigation is undertaken by entities (e.g. fumigation companies or individuals) either in a fumigation facility or at other suitable locations (e.g. cargo ship hold) (hereafter, fumigation facilities and fumigation operators are referred to as fumigation entities).	**Singapore** To include suitability of the location for fumigation as "other locations" implied that fumigation can be carried out anywhere regardless. *Category : SUBSTANTIVE*
275	53	La fumigación la realizan diversas entidades fumigadoras (p. ej., personas o empresas especializadas en la actividad) en una instalación de fumigación o en otros ~~emplazamientos~~ lugares (p. ej., en la bodega de un barco carguero) (en adelante, se denominan "entidades fumigadoras" las instalaciones de fumigación y los operadores que la realizan).	**Panama** Traducción correcta del Inglés al Español. *Category : TRANSLATION*
276	53	La fumigación la realizan diversas entidades fumigadoras (p. ej., personas o empresas especializadas en la actividad) en una instalación de fumigación o en otros ~~emplazamientos~~ lugares (p. ej., en la bodega de un barco carguero) (en adelante, se denominan "entidades	**OIRSA** Traducción correcta del Inglés al Español. *Category : TRANSLATION*

#	Para	Text	Comment
		fumigadoras" las instalaciones de fumigación y los operadores que la realizan).	
277	54	**3. ~~Treatment~~ Fumigation Application**	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : TECHNICAL*
278	54	**3. ~~Treatment~~ Fumigation Application**	**IPPC Regional Workshop Latin America** For consistency with the Tiltle, Scope and text of the ISPM. *Category : TECHNICAL*
279	54	**3. Treatment Application**	**Ozone Secretariat** Additional proposed text: "General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride differ in their mode of action. Treatment schedules may be effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or a particular life stages. Some fumigants react with certain commodities or materials and need to be taken into consideration prior to treatment. E.g. phosphine reacts strongly with copper and will destroy electronics". A general statement that should be in either background or application. *Category : TECHNICAL*
280	54	**3. ~~Treatment~~ Fumigation Application**	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 21:53 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
281	54	**3~~.~~ Aplicación de la fumigación~~Aplicación de los tratamientos~~**	**Colombia** Para tener coherencia de acuerdo al titulo, alcance y texto de la NIMF *Category : TECHNICAL*
282	54	**3. Aplicación de ~~los tratamientos~~la fumigación**	**Panama** Usar en toda la norma presente la palabra "fumigación" en lugar de "tratamiento"; para estar en consistente con el título, ámbito y texto de la presente norma. *Category : TECHNICAL*
283	54	**3. Aplicación de ~~los tratamientos~~la fumigación**	**OIRSA** Usar en toda la norma presente la palabra "fumigación" en lugar de "tratamiento"; para estar en consistente con el título, ámbito y texto de la presente norma. *Category : TECHNICAL*
284	55	Fumigation may be applied at any point along the supply chain, for example:	**IPPC Regional Workshop Asia** To retain. **APPPC** agreed by APPPC **Nepal** Support to Regional Comment **Malaysia** Malaysia agreed with APPPC **Viet Nam** Vietnam agreed with APPPC comment. **China** China agreed to this regional comments.

#	Para	Text	Comment
			Nepal Support to Regional Comment **India** agree to comments *Category : EDITORIAL*
285	55	Fumigation may be applied at any point along the supply ~~chain~~chain of the commodity, for example:	**EPPO** To qualify 'the supply chain', which otherwise is unclear *Category : TECHNICAL*
286	55	Fumigation may be applied at any point along the supply ~~chain~~chain of a commodity, for example:	**European Union** To qualify 'the supply chain', which otherwise is unclear. *Category : TECHNICAL*
287	55	Fumigation may be applied at any point along the supply ~~chain~~chain (as long as it comply with other international commitments, conventions and agreements etc,), for example:	**Sri Lanka** *Category : SUBSTANTIVE*
288	55	La fumigación podrá aplicarse en cualquier punto a lo largo del proceso de ~~la cadena de suministro~~importación y exportación, por ejemplo:	**Panama** Mejor comprensión del texto y términos comúnmente utilizados en idioma español. *Category : EDITORIAL*
289	55	La fumigación podrá aplicarse en cualquier punto a lo largo del proceso de ~~la cadena de suministro~~importación y exportacion, por ejemplo:	**OIRSA** Mejor comprensión del texto y términos comúnmente utilizados en idioma español. *Category : EDITORIAL*
290	56	as an integral part of ~~packing~~ production or packaging operations	**EPPO** For consistency with the draft standard on temperature treatments following first consultation. *Category : SUBSTANTIVE*
291	56	as an integral part of ~~packing~~ production or packaging operations	**European Union** For consistency with the draft standard on temperature treatments following first consultation. *Category : SUBSTANTIVE*
292	56	como parte ~~integrante~~ integral de las operaciones de ~~embalaje~~embalaje-empaque	**Panama** Mejor comprensión del texto y términos comúnmente utilizados en idioma español. *Category : EDITORIAL*
293	56	como parte ~~integrante~~ integral de las operaciones de ~~embalaje~~embalaje-empaque	**OIRSA** Mejor comprensión del texto y términos comúnmente utilizados en idioma español. *Category : EDITORIAL*
294	57	just before dispatch (e.g. at centralized locations at the port)	**IPPC Regional Workshop Asia** Suggest to re-order the packing operations accordingly i.e. dispatch or storage is done after packaging for a better reflection of the actial operations. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Viet Nam** Vietnam agreed with this APPPC comment. **China**

#	Para	Text	Comment
			China agreed to this regional comments. **Japan** Japan support regional comment. *Category : EDITORIAL*
295	57	~~just before dispatch (e.g. at centralized locations at the port)~~	**EPPO** Suggest to move after paragraph 59 (indent "during storage") for a more logical sequence. *Category : EDITORIAL*
296	57	~~just before dispatch (e.g. at centralized locations at the port)~~	**European Union** Suggest to move after paragraph 59 (indent "during storage") for a more logical sequence. *Category : EDITORIAL*
297	57	just before ~~dispatch (e.g. at~~ dispatch~~e~~ ~~entralized locations at the port)~~	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*
298	57	just before dispatch (e.g. at centralized locations at the port)	**IPPC Regional Workshop Latin America** "dispatch" must be translated as "despacho" *Category : TRANSLATION*
299	57	just before dispatch (e.g. at centralized locations at the port)	**Nepal** Not seemed to be in sequence. I mean dispatch or storage is done after packaging. *Category : EDITORIAL*
300	57	justo antes ~~de la expedición~~ del despacho (p. ej., en lugares centralizados en el puerto)	**Colombia** Término adecuado para el contexto de la NIMF *Category : EDITORIAL*
301	57	justo antes de la ~~expedición~~ importación y exportación (p. ej., en lugares centralizados en el puerto)	**Panama** Mejor comprensión del texto y términos comúnmente utilizados en idioma español. *Category : EDITORIAL*
302	57	justo antes de la ~~expedición~~ importación y exportación (p. ej., en lugares centralizados en el puerto)	**OIRSA** Mejor comprensión del texto y términos comúnmente utilizados en idioma español. *Category : EDITORIAL*
303	58	after packaging (e.g. once the commodity is packaged for ~~dispatch)~~dispatch) if packaging materials are permeable.	**IPPC Regional Workshop Asia** revise with additional sentences. **APPPC** agreed by APPPC **Viet Nam** Vietnam agreed with this APPPC comment. **Thailand** Thailand agree with APPPC comment. *Category : SUBSTANTIVE*
304	58	after packaging ~~(e.g. once the commodity is packaged for dispatch)~~	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*
305	58	~~after packaging (e.g. once the commodity is packaged for dispatch)~~	**Philippines** Fumigation should be dome prior to packing, there are some packaging materials that are impermeable. *Category : SUBSTANTIVE*
306	58	después del embalaje (p. ej., una vez que el producto ha	**Panama** Mejor comprensión del texto y términos comúnmente utilizados en idioma español

#	Para	Text	Comment
		sido embalado para su ~~expedición)~~importación y exportación)	*Category : EDITORIAL*
307	58	después del embalaje (p. ej., una vez que el producto ha sido embalado para su ~~expedición)~~importación y exportación)	**OIRSA** Mejor comprensión del texto y términos comúnmente utilizados en idioma español. *Category : EDITORIAL*
308	59	during storage - just before dispatch (e.g. at centralized locations at the port)	**EPPO** Moved from paragraph 57 for a more logical sequence. *Category : EDITORIAL*
309	59	~~during storage~~- during storage - just before dispatch (e.g. at centralized locations at the port)	**European Union** Moved from paragraph 57 for a more logical sequence. *Category : EDITORIAL*
310	60	~~during transport~~	**Thailand** Fumigation treatment application during transport should not be allowed for safety reasons. *Category : SUBSTANTIVE*
311	60	during transport	**Philippines** Not allowed for safety reasons. *Category : SUBSTANTIVE*
312	61	after ~~unloading~~unloading (on arrival fumigation).	**Australia** After unloading may be performed in the country of import and may be designated as on-arrival fumigation or off shore fumigation to differentiate it from the one which is undertaken in the country of import. *Category : TECHNICAL*
313	62	The minimum requirement of fumigation is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained at the required level throughout the commodity for the scheduled treatment minimum temperature and duration, allowing the required efficacy to be achieved. ~~Appendix 1 provides guidance for fumigation efficacy studies.~~	**Costa Rica** Accept from IPPC Workshop Regional LA *Category : TECHNICAL*
314	62	The minimum requirement of fumigation is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained at the required level throughout the commodity for the scheduled treatment minimum temperature and duration, allowing the required efficacy to be achieved. ~~Appendix 1 provides guidance for fumigation efficacy studies.~~	**IPPC Regional Workshop Latin America** Last phrase deleted by general comments *Category : TECHNICAL*
315	62	The ~~minimum~~ requirement of fumigation treatment is to	**COSAVE** Changes suggested to align with the draft ISPM on temperature treatments. Last sentence

#	Para	Text	Comment
		ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained ~~at the required level~~ throughout the commodity for the ~~scheduled~~ specified treatment minimum temperature and duration, allowing the required efficacy to be achieved. ~~Appendix 1 provides guidance for fumigation efficacy studies.~~	deleted as per general comment, proposing the deletion of Appendix 1. *Category : TECHNICAL*
316	62	The ~~minimum~~ requirement of fumigation treatment is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained ~~at the required level~~ throughout the commodity for the ~~scheduled~~ specified treatment minimum temperature and duration, allowing the required efficacy to be achieved. ~~Appendix 1 provides guidance for fumigation efficacy studies.~~	**Peru** Changes suggested to align with the draft ISPM on temperature treatments. Last sentence deleted as per general comment, proposing the deletion of Appendix 1. *Category : TECHNICAL*
317	62	The minimum requirement of fumigation is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained at the required level ~~throughout~~ to the ~~commodity~~ pest location for the scheduled treatment minimum temperature and duration, allowing the required efficacy to be achieved. Appendix 1 provides guidance for fumigation efficacy studies.	**Ozone Secretariat** Often the target pest can be surface only or it is the wood packaging that is being treated rather than the commodity. *Category : SUBSTANTIVE*
318	62	The ~~minimum~~ requirement of fumigation treatment is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained ~~at the required level~~ throughout the commodity for the ~~scheduled~~ specified treatment minimum temperature and duration, allowing the required efficacy to be achieved~~. Appendix 1 provides guidance for fumigation efficacy studies~~.	**Argentina** Changes suggested to align with the draft ISPM on temperature treatments. Last sentence deleted as per general comment, proposing the deletion of Appendix 1. *Category : TECHNICAL*
319	62	The minimum requirement of fumigation is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained at the required level throughout the commodity for the scheduled treatment minimum temperature and duration, allowing the required efficacy to be achieved. ~~Appendix 1 provides guidance for fumigation efficacy studies.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 21:57 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
320	62	The ~~minimum~~ requirement of fumigation treatment is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained ~~at the required level~~	**Brazil** Changes suggested to align with the draft ISPM on temperature treatments. Last sentence deleted as per general comment, proposing the deletion of Appendix 1. *Category : TECHNICAL*

#	Para	Text	Comment
		throughout the commodity for the ~~scheduled~~ specified treatment minimum temperature and duration, allowing the required efficacy to be achieved~~. Appendix 1 provides guidance for fumigation efficacy studies~~.	
321	62	The ~~minimum~~ requirement of fumigation is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained at the required level throughout the commodity for the ~~scheduled~~ specified treatment minimum temperature and duration, allowing the required efficacy to be achieved. ~~Appendix 1 provides guidance for fumigation efficacy studies.~~	**EPPO** For consistency with the draft standard on temperature treatments following first consultation. NB: last sentence moved to the end of paragraph 51. *Category : SUBSTANTIVE*
322	62	The minimum requirement of fumigation is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained at the required level throughout the commodity for the scheduled treatment minimum temperature and duration, allowing the required efficacy to be achieved. Appendix 1 provides guidance for fumigation efficacy studies.	**United States of America** Compare to the Appendix in temperature treatments draft. Perhaps all such efficacy studies appendices from different drafts should be combined in 1 guidance document, and made Supplement to ISPM 28. *Category : SUBSTANTIVE*
323	62	The ~~minimum~~ requirement of fumigation is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained at the required level throughout the commodity for the ~~scheduled~~ specified treatment minimum temperature and duration, allowing the required efficacy to be achieved. ~~Appendix 1 provides guidance for fumigation efficacy studies.~~	**European Union** For consistency with the draft standard on temperature treatments following first consultation. NB: last sentence moved to the end of paragraph 51. *Category : SUBSTANTIVE*
324	62	The ~~minimum~~ requirement of fumigation treatment is to ensure that the scheduled parameters (e.g. concentration–time product (CT)) are attained ~~at the required level~~ throughout the commodity for the ~~scheduled~~ specified treatment minimum temperature and duration, allowing the required efficacy to be achieved. ~~Appendix 1 provides guidance for fumigation efficacy studies.~~	**Uruguay** Changes suggested to align with the draft ISPM on temperature treatments. Last sentence deleted as per general comment, proposing the deletion of Appendix 1. *Category : TECHNICAL*
325	62	The minimum requirement of fumigation is to ensure that the scheduled parameters ~~(e.g. concentration–time product (CT)~~are attained at the required level throughout the	**Australia** Remove example as CT product is not relevant for all fumigations and the paragraph is clear without it. *Category : TECHNICAL*

#	Para	Text	Comment
		commodity for the scheduled treatment minimum temperature and duration, allowing the required efficacy to be achieved. Appendix 1 provides guidance for fumigation efficacy studies.) ~~are attained at the required level throughout the commodity for the scheduled treatment minimum temperature and duration, allowing the required efficacy to be achieved. Appendix 1 provides guidance for fumigation efficacy studies.~~	
326	62	El requisito mínimo de la fumigación es garantizar que durante el tiempo de tratamiento y a la temperatura de tratamiento mínimos previstos se alcance, en todo el producto, el nivel requerido de los parámetros programados (p. ej., el producto de concentración × tiempo [CT]), de modo que pueda alcanzarse el nivel de eficacia requerido. ~~En el Apéndice 1 se ofrece orientación relativa a los estudios sobre la eficacia de la fumigación.~~	**Colombia** La ultima frase es eliminada de acuerdo al comentario general *Category : TECHNICAL*
327	62	El requisito mínimo de la fumigación es garantizar que durante el tiempo ~~de tratamiento~~ y a la temperatura de ~~tratamiento~~ fumigación mínimos previstos se alcance, en todo el producto, el nivel requerido de los parámetros programados (p. ej., el producto de concentración × tiempo [CT]), de modo que pueda alcanzarse el nivel de eficacia requerido. En el Apéndice 1 se ofrece orientación relativa a los estudios sobre la eficacia de la fumigación.	**Panama** Mejor comprensión del texto *Category : EDITORIAL*
328	62	El requisito mínimo de la fumigación es garantizar que durante el tiempo de ~~tratamiento~~ fumigación y a la temperatura de ~~tratamiento~~ fumigacion mínimos previstos se alcance, en todo el producto, el nivel requerido de los parámetros programados (p. ej., el producto de concentración × tiempo [CT]), de modo que pueda alcanzarse el nivel de eficacia requerido. En el Apéndice 1 se ofrece orientación relativa a los estudios sobre la eficacia de la fumigación.	**OIRSA** Mejor comprensión del texto *Category : EDITORIAL*
329	63	Parameters to consider when applying fumigation are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity~~, all of~~	**Costa Rica** Deleted because it´s not necessary Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*

#	Para	Text	Comment
		~~which should be compatible with officially approved schedules or ISPM 28~~. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	
330	63	Parameters to consider when applying fumigation are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity~~, all of which should be compatible with officially approved schedules or ISPM 28~~. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
331	63	Parameters to consider when applying fumigation are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity, all of which should be compatible with officially approved schedules or ISPM 28. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	**IPPC Regional Workshop Asia** To retain. **APPPC** agreed by APPPC **Nepal** Support to Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. **Nepal** Support to Regional Comment **India** agreed to comments *Category : EDITORIAL*
332	63	Parameters to consider when applying fumigation are penetration, dilution or sorption impediments to a fumigant to reach the core of the commodity, the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity, all of which should be compatible with officially approved schedules or ISPM 28. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	**Canada** Adding technical details. *Category : TECHNICAL*
333	63	Parameters to consider when applying fumigation treatment are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity~~, all of which should be compatible with officially approved schedules or ISPM 28~~. Modified	**COSAVE** Text deleted because it is not necessary *Category : TECHNICAL*

#	Para	Text	Comment
		atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	
334	63	Parameters to consider when applying fumigation treatment are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity~~, all of which should be compatible with officially approved schedules or ISPM 28~~. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	**Peru** Deleted because it´s not necessary *Category : TECHNICAL*
335	63	Parameters to consider when applying fumigation are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity, all of which should be compatible with officially approved schedules or ISPM 28. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy. Packaging, wrapping and costings may prevent or slow penetration of the fumigant to the target pest.	**Ozone Secretariat** *Category : SUBSTANTIVE*
336	63	Parameters to consider when applying fumigation are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the ~~commodity~~commodity and pressure inside fumigation enclosure, all of which should be compatible with officially approved schedules or ISPM 28. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	**Ozone Secretariat** Air pressure is one of the factors which affects fumigation efficacy. *Category : SUBSTANTIVE*
337	63	Parameters to consider when applying fumigation treatment are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity~~, all of which should be compatible with officially approved schedules or ISPM 28~~. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	**Argentina** Text deleted because it is not necessary *Category : TECHNICAL*
338	63	Parameters to consider when applying fumigation are the	**CA** Accepted from IPPC Regional Workshop LA.

#	Para	Text	Comment
		minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity~~, all of which should be compatible with officially approved schedules or ISPM 28~~. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	*Category : TECHNICAL*
339	63	Parameters to consider when applying fumigation treatment are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity~~, all of which should be compatible with officially approved schedules or ISPM 28~~. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	**Brazil** Text deleted because it is not necessary *Category : TECHNICAL*
340	63	Parameters to consider when applying fumigation are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity, as well as the loading configuration of the commodity, all of which should be compatible with officially approved schedules or ISPM 28. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy. Specific fumigation sites should be evaluated to decide whether succesful gas circulation can be maintained in such places (e.g.,shipholds for commodities such as large amounts as grains).	**EPPO** Loading configuration is important for the effectiveness of fumigation. Sentence added to take into account a relevant specific case. *Category : TECHNICAL*
341	63	Parameters to consider when applying fumigation are the minimum dose, temperature and duration of the treatment, and sorption of commodity treated, and where applicable the humidity of the treatment environment or moisture content of the commodity, all of which should be compatible with officially approved schedules or ISPM 28. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	**United States of America** Addition to first sentence: For technical accuracy Last sentence: This should be discussed in the Modified atmospheres ISPM rather than in this fumigation ISPM *Category : TECHNICAL*
342	63	Parameters to consider when applying fumigation are the minimum dose, temperature and duration of the treatment,	**European Union** Loading configuration is important for the effectiveness of fumigation.

#	Para	Text	Comment
		and where applicable the humidity of the treatment environment or moisture content of the commodity, as well as the loading configuration of the commodity, all of which should be compatible with officially approved schedules or ISPM 28. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy. Specific fumigation sites should be evaluated to decide whether successful gas circulation can be maintained in such places (e.g. ship holds for commodities such as large amounts as grains).	Sentence added to take into account a relevant specific case. *Category : TECHNICAL*
343	63	Parameters to consider when applying fumigation treatment are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity~~, all of which should be compatible with officially approved schedules or ISPM 28~~. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	**Uruguay** Text deleted because it is not necessary *Category : TECHNICAL*
344	63	Parameters to consider when applying fumigation are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity, nature of the commodity, all of which should be compatible with officially approved schedules or ISPM 28. Modified atmospheres created by packaging or by the commodity itself may alter treatment efficacy.	**Sri Lanka** nature of the commodity (eg. growing media are exported as compressed products. the efficacy of the treatment may vary depending on the nature of the material whether it is in the loose form or compressed form) Therefore, it will be important to decide the status or stage of production at which the treatment needs to be applied) *Category : SUBSTANTIVE*
345	63	Parameters to consider when applying fumigation are the minimum dose, temperature and duration of the treatment, and where applicable the humidity of the treatment environment or moisture content of the commodity, all of which should be compatible with officially approved schedules or ISPM 28. Modified atmospheres created by packaging or by the commodity itself applied during fumigation may alter treatment efficacy.	**Singapore** For clarity of the sentence to refer to the possible implication of Modified atmospheres on fumigation treatment efficacy. *Category : EDITORIAL*
346	63	Al aplicar la fumigación han de considerarse los parámetros de dosis mínima, temperatura y duración del tratamiento,	**Colombia** Texto eliminado debido a que no es necesario. *Category : TECHNICAL*

#	Para	Text	Comment
		así como, cuando proceda, la humedad del entorno de tratamiento o el contenido de humedad del producto~~, todo lo cual debería ser compatible con los protocolos aprobados oficialmente o con la NIMF 28~~. Las atmósferas modificadas creadas por el embalaje o por el propio producto podrán alterar la eficacia del tratamiento.	
347	63	Al aplicar la fumigación han de considerarse los parámetros de dosis mínima, temperatura y ~~duración del tratamiento~~duración, así como, cuando proceda, la humedad del ~~entorno~~ ambiente de la instalación de tratamiento o el contenido de humedad del producto, todo lo cual debería ser compatible con los protocolos aprobados oficialmente o con la NIMF 28. Las atmósferas modificadas creadas por el embalaje o por el propio producto podrán alterar la eficacia del tratamiento.	**Panama** Mejor comprensión del texto *Category : EDITORIAL*
348	63	Al aplicar la fumigación han de considerarse los parámetros de dosis mínima, temperatura y ~~duración del tratamiento~~duración, así como, cuando proceda, la humedad del ~~entorno~~ ambiente de la instalación de tratamiento o el contenido de humedad del producto, todo lo cual debería ser compatible con los protocolos aprobados oficialmente o con la NIMF 28. Las atmósferas modificadas creadas por el embalaje o por el propio producto podrán alterar la eficacia del tratamiento.	**OIRSA** Mejor comprensión del texto *Category : EDITORIAL*
349	64	The treatment protocol should describe the process of pre- and post-conditioning to reach the required dose, where these processes are critical to the treatment achieving the required efficacy, while preserving the commodity quality. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**COSAVE** Text added because it is important to mention the commodity quality, as it was included in the draft ISPM on temperature treatments. *Category : TECHNICAL*
350	64	The treatment protocol should describe the process of pre- and post-conditioning to reach the required dose, where these processes are critical to the treatment achieving the required efficacy, while preserving the commodity quality. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**Peru** Text added because it is important to mention the commodity quality, as it was included in the draft ISPM on temperature treatments. *Category : TECHNICAL*
351	64	The treatment protocol should describe the process of pre-	**Argentina** Text added because it is important to mention the commodity quality, as it was included in

#	Para	Text	Comment
		and post-conditioning to reach the required dose, where these processes are critical to the treatment achieving the required efficacy, while preserving the commodity quality. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	the draft ISPM on temperature treatments. *Category : TECHNICAL*
352	64	The treatment protocol should describe the process of pre- and post-conditioning to apply the dose and reach the required ~~dose~~concentration, where these processes are critical to the treatment achieving the required efficacy. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 22:21 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
353	64	The treatment protocol should describe the process of pre- and post-conditioning to apply the dose and reach the required ~~dose~~concentration, where these processes are critical to the treatment achieving the required efficacy. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**IPPC Regional Workshop Latin America** Most acurrate text *Category : TECHNICAL*
354	64	The treatment protocol should describe the process of pre- and post-conditioning to reach the required dose, where these processes are critical to the treatment achieving the required efficacy, while preserving the commodity quality. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**Brazil** Text added because it is important to mention the commodity quality, as it was included in the draft ISPM on temperature treatments. *Category : TECHNICAL*
355	64	A treatment protocol should be developed or approved by the NPPO. The treatment protocol should describe the process of pre- and post-conditioning to reach the required dose, where these processes are critical to the treatment achieving the required ~~efficacy~~efficacy while preserving commodity quality. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**EPPO** It is important to clearly state that a treatment protocol need to be developed or approved by the NPPO. This clarify the following concepts. For consistency with the draft standard on temperature treatments following first consultation. *Category : SUBSTANTIVE*
356	64	The treatment protocol should describe the process of pre- and post-conditioning to reach the required dose, where these processes are critical to the treatment achieving the required efficacy. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**New Zealand** Add general text to background or application **India** agree to comments *Category : TECHNICAL*

#	Para	Text	Comment
		General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride differ in their mode of action. Treatment schedules may be effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or a particular life stages. Some fumigants react with certain commodities or materials and need to be taken into consideration prior to treatment. E.g. phosphine reacts strongly with copper and will destroy electronics.	
357	64	The treatment protocol should describe the process of pre- and post-conditioning to reach the required dose, where these processes are critical to the treatment achieving the required efficacy. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**Kenya** Include statement to define treatment failure. Verification of treatment efficacy. Does the term contingency procedures cover raised concern? *Category : TECHNICAL*
358	64	The treatment protocol should describe the process of pre- and post-conditioning to reach the required dose, where these processes are critical to the treatment achieving the required ~~efficacy~~efficacy while preserving commodity quality. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**European Union** For consistency with the draft standard on temperature treatments following first consultation. *Category : SUBSTANTIVE*
359	64	A treatment protocol should be developed or approved by the NPPO. The treatment protocol should describe the process of pre- and post-conditioning to reach the required dose, where these processes are critical to the treatment achieving the required efficacy. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**European Union** It is important to clearly state that a treatment protocol need to be developed or approved by the NPPO. This clarify the following concepts. *Category : SUBSTANTIVE*
360	64	The treatment protocol should describe the process of pre- and post-conditioning to reach the required dose, where these processes are critical to the treatment achieving the required efficacy, while preserving the commodity quality. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	**Uruguay** Text added because it is important to mention the commodity quality, as it was included in the draft ISPM on temperature treatments. *Category : TECHNICAL*
361	64	The treatment protocol should describe the process of pre- and post-conditioning to reach the required dose, where	**PPPO** in addition to contingency procedures to give examples as well. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		these processes are critical to the treatment achieving the required efficacy. The protocol should also include contingency procedures and guidance on corrective actions for treatment failures.	
362	64	En el protocolo de tratamiento deberían describirse los procesos de acondicionamiento previo y posterior para ~~alcanzar~~ aplicar la dosis y alcanzar la concentración requerida cuando estos procesos sean fundamentales para que el tratamiento alcance la eficacia requerida. En el protocolo deberían incluirse también procedimientos de contingencia y orientación sobre acciones correctivas para tratamientos fallidos.	**Colombia** Texto más preciso *Category : TECHNICAL*
363	64	En el protocolo de ~~tratamiento~~ fumigación deberían describirse los procesos de acondicionamiento previo y posterior para alcanzar la ~~dosis~~ concentración requerida cuando estos procesos sean fundamentales para que ~~el tratamiento~~ la fumigación alcance la eficacia requerida. En el protocolo de fumigación deberían incluirse también procedimientos de contingencia y orientación sobre acciones ~~correctivas para tratamientos fallidos~~correctivas.	**Panama** Uso correcto de términos para comprensión del texto *Category : TECHNICAL*
364	64	En el protocolo de ~~tratamiento~~ fumigación deberían describirse los procesos de acondicionamiento previo y posterior para alcanzar la ~~dosis~~ concentración requerida cuando estos procesos sean fundamentales para que el ~~tratamiento~~ la fumigación alcance la eficacia requerida. En el protocolo de fumigación deberían incluirse también procedimientos de contingencia y orientación sobre acciones ~~correctivas para tratamientos fallidos~~correctivas.	**OIRSA** Uso correcto de términos para comprensión del texto. *Category : TECHNICAL*
365	65	**4. ~~Tipos~~ Formas de ~~tratamientos~~fumigación**	**Panama** Termino correcto para clarificar el texto y concordancia con el párrafo de la presente norma. *Category : TECHNICAL*
366	65	**4. Formas~~Tipos~~ de ~~tratamientos~~fumigación**	**OIRSA** Termino correcto para clarificar el texto y concordancia con el párrafo de la presente norma. *Category : TECHNICAL*
367	66	The following are the ~~main groups~~ main types of ~~fumigant~~ fumigation treatment ~~types~~ used.	**Costa Rica** The descrition is the types of fumigation *Category : TECHNICAL*
368	66	~~The following are the main groups of fumigant treatment types used.~~	**IPPC Regional Workshop Asia** to delete this redundant sentence **APPPC**

#	Para	Text	Comment
			agreed by APPPC **Viet Nam** Vietnam agreed with this APPPC comment. *Category : EDITORIAL*
369	66	The following are the main ~~groups of fumigant treatment~~ types of fumigation treatments used.	**Peru** section describes the types of fumigation treatments *Category : TECHNICAL*
370	66	The following are the main ~~groups of fumigant treatment~~ types of fumigation treatments used.	**Argentina** Section 4 describes the types of fumigation treatments *Category : TECHNICAL*
371	66	The following are the main ~~groups~~ types of ~~fumigant~~ fumigation treatment ~~types~~ used.	**Brazil** Section 4 describes the types of fumigation treatments *Category : TECHNICAL*
372	66	The following are the main ~~groups of fumigant treatment~~ types of fumigation treatments used.	**Uruguay** Section 4 describes the types of fumigation treatments *Category : TECHNICAL*
373	66	~~The following are the main groups of fumigant treatment types used.~~	**Singapore** Proposed to delete this redundant sentence. *Category : SUBSTANTIVE*
374	66	~~The following are the main groups of fumigant treatment types used.~~	**Thailand** It is redundant. *Category : EDITORIAL*
375	66	The following are the main ~~groups of fumigant treatment~~ types of fumigation treatments used.	**COSAVE** Section 4 describe the types of treatments. *Category : TECHNICAL*
376	66	~~Los grupos~~ Las principales formas de tipos de ~~tratamientos de~~ fumigación ~~utilizados~~ utilizadas son ~~los~~ las siguientes.	**Panama** Termino correcto para clarificar el texto y concordancia con el párrafo de la presente norma. *Category : TECHNICAL*
377	66	Los grupos principales de tipos de tratamientos de fumigación utilizados son los siguientes~~.~~:	**Colombia** Se sugiere colocar los dos puntos (:) al final del párrafo *Category : EDITORIAL*
378	66	~~Los grupos~~ Las principales formas de ~~tipos~~ de ~~tratamientos de~~ fumigación ~~utilizados~~ utilizadas son ~~los~~ las siguientes.	**OIRSA** Termino correcto para clarificar el texto y concordancia con el párrafo de la presente norma. *Category : TECHNICAL*
379	68	The most common ~~forms~~ types of fumigation are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single ~~fumigants~~ fumigant treatment are generally simple, requiring a single application to achieve a required minimum ~~dose~~ concentration over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**Costa Rica** "dose" for "concentration" Most accurate term Single fumigants" was changed by "single fumigant treatments" for consistency with the title of this section. It is more accurate to use the term concentration instead of dose. *Category : TECHNICAL*

#	Para	Text	Comment
380	68	The most common forms of fumigation are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum ~~dose~~ concentration over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**IPPC Regional Workshop Latin America** Most accurate term *Category : TECHNICAL*
381	68	The most common forms of fumigation are those that apply a single fumigant. ~~General use~~ Commonly used fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum dose over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**IPPC Regional Workshop Asia** To replace "General use" with "Commonly used" for better usage of terms. **APPPC** agreed by APPPC **Viet Nam** Vietnam agreed with this APPPC comment. **Thailand** Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. **Nepal** Support and agree to Regional Comment **Japan** Japan support regional comment. *Category : EDITORIAL*
382	68	The most common ~~forms~~ types of fumigation treatments are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single ~~fumigants~~ fumigant treatments are generally simple, requiring a single application to achieve a required minimum ~~dose~~ concentration over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**COSAVE** "Single fumigants" was changed by "single fumigant treatments" for consistency with the title of this section. It is more accurate to use the term concentration instead of dose. *Category : TECHNICAL*
383	68	The most common ~~forms~~ types of fumigation treatments are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest	**Peru** "Single fumigants" was changed by "single fumigant treatments" for consistency with the title of this section. It is more accurate to use the term concentration instead of dose. *Category : TECHNICAL*

#	Para	Text	Comment
		groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single ~~fumigants~~ fumigant treatments are generally simple, requiring a single application to achieve a required minimum ~~dose~~ concentration over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	
384	68	The most common forms of fumigation are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum dose over a specified ~~duration~~duration that achieves the required level of efficacy for the target pest. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**Ozone Secretariat** Temperature is important and treatment schedules are specific to the pest e.g fruit fly schedule will not kill snails. *Category : TECHNICAL*
385	68	The most common ~~forms~~ types of fumigation treatments are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single ~~fumigants~~ fumigant treatments are generally simple, requiring a single application to achieve a required minimum ~~dose~~ concentration over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**Argentina** "Single fumigants" was changed by "single fumigant treatments" for consistency with the title of this section. It is more accurate to use the term concentration instead of dose. *Category : TECHNICAL*
386	68	The most common forms of fumigation are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum ~~dose~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 22:25 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*

#	Para	Text	Comment
		concentration over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	
387	68	The most common ~~forms~~ types of fumigation treatments are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single ~~fumigants~~ fumigant treatments are generally simple, requiring a single application to achieve a required minimum ~~dose~~ concentration over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**Brazil** "Single fumigants" was changed by "single fumigant treatments" for consistency with the title of this section. It is more accurate to use the term concentration instead of dose. *Category : TECHNICAL*
388	68	The most common ~~forms of fumigation~~ fumigations used are those that apply a single fumigant. General use fumigants such as ~~methyl bromide,~~ phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum dose over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**EPPO** Groups, types, forms… There is no explanation in the draft what they are and what are differences between. Should be explained or re-written. If the IPPC society works on the replacement or reduction of the use of methyl bromide as a phytosanitary measure, whay this is not clearly stated during the text? MB is equaly described as the other fumigants? In addition, there are already other good examples. *Category : SUBSTANTIVE*
389	68	The most common ~~forms~~ types of fumigation treatments are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single ~~fumigants~~ fumigant treatments are generally simple, requiring a single application to achieve a required minimum ~~dose~~ concentration over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**Uruguay** "Single fumigants" was changed by "single fumigant treatments" for consistency with the title of this section. It is more accurate to use the term concentration instead of dose. *Category : TECHNICAL*
390	68	The most common forms of fumigation are those that apply	**United States of America** Deletion - "simple" is relative - it may be difficult for others.

#	Para	Text	Comment
		a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants ~~are generally simple, requiring~~ require a single application to achieve a required minimum dose over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	Last sentence - Propose to remove Appendix 2. This information would be available elsewhere *Category : SUBSTANTIVE*
391	68	The most common forms of fumigation are those that apply a single fumigant. General use fumigants such as ~~methyl bromide,~~ phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum dose over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**European Union** If the IPPC society works on the replacement or reduction of the use of methyl bromide as a phytosanitary measure, why this is not clearly stated during the text? MB is equally described as the other fumigants? In addition, there are already other good examples. *Category : SUBSTANTIVE*
392	68	The most common ~~forms of fumigation~~ fumigations used are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum dose over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**European Union** Groups, types, forms… There is no explanation in the draft what they are and what are the differences between. Should be explained or, better, re-written? *Category : TECHNICAL*
393	68	The most common forms of fumigation are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum dose over a	**New Zealand** Temperature is important and treatment schedules are specific to the pest e.g fruit fly schedule will not kill snails *Category : TECHNICAL*

#	Para	Text	Comment
		specified ~~duration~~duration that achieves the required level of efficacy for the target pest. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	
394	68	~~The most common forms of fumigation are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages.~~ Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum dose in a temperature range over a specified ~~duration. A list~~ duration that achieves the required level of ~~commonly used fumigants and their chemical properties is provided in Appendix 2~~efficacy of a target pest.	**Australia** Temperature is important and treatment schedules are specific to the pest e.g fruit fly schedule will not kill snails. *Category : SUBSTANTIVE*
395	68	The most common forms of fumigation are those that apply a single fumigant. General use fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum dose over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**Sri Lanka** "methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages." However, not all mentioned fumigants are effective against all the pests. For example general dosage-duration conditions of methyl bromide is not effective afainst certain fungi *Category : SUBSTANTIVE*
396	68	The most common forms of fumigation are those that apply a single fumigant. ~~General use~~ Commonly used fumigants such as methyl bromide, phosphine or sulphuryl fluoride rely on a mode of action that is effective against all pest groups or against one particular group (e.g. arthropods, fungi, nematodes) and all or most life stages. Treatment schedules for single fumigants are generally simple, requiring a single application to achieve a required minimum dose over a specified duration. A list of commonly used fumigants and their chemical properties is provided in Appendix 2.	**Philippines** *Category : EDITORIAL*

#	Para	Text	Comment
397	68	En los tipos de fumigación más comunes se aplica un único fumigante. Los fumigantes para uso general como el bromuro de metilo, la fosfina o el fluoruro de sulfurilo tienen un modo de acción eficaz contra todos los grupos de plagas o contra un grupo concreto (p. ej., los artrópodos, los hongos o los nematodos) y contra todas las etapas de desarrollo o la mayoría de ellas. Los protocolos de tratamiento con un único fumigante suelen ser sencillos: con una sola aplicación se alcanza una ~~dosis~~ concentración mínima requerida durante un tiempo especificado. En el Apéndice 2 se proporciona una lista de fumigantes de uso habitual y sus propiedades químicas.	**Colombia** Texto más preciso *Category : TECHNICAL*
398	68	En ~~los tipos~~ las formas de fumigación más comunes se aplica un único fumigante. Los fumigantes para uso general como el bromuro de metilo, la fosfina o el fluoruro de sulfurilo tienen un modo de acción eficaz contra todos los grupos de plagas o contra un grupo concreto (p. ej., los artrópodos, los hongos o los nematodos) y contra todas las etapas de desarrollo o la mayoría de ellas. Los protocolos de tratamiento con un único fumigante suelen ser sencillos: con una sola aplicación se alcanza una ~~dosis~~ concentración mínima requerida durante un tiempo especificado. En el Apéndice 2 se proporciona una lista de fumigantes de uso habitual y sus propiedades químicas.	**Panama** Aplicando los términos más apropiados al ámbito de aplicación de la norma presente *Category : SUBSTANTIVE*
399	68	En ~~los tipos~~ las formas de fumigación más comunes se aplica un único fumigante. Los fumigantes para uso general como el bromuro de metilo, la fosfina o el fluoruro de sulfurilo tienen un modo de acción eficaz contra todos los grupos de plagas o contra un grupo concreto (p. ej., los artrópodos, los hongos o los nematodos) y contra todas las etapas de desarrollo o la mayoría de ellas. Los protocolos de tratamiento con un único fumigante suelen ser sencillos: con una sola aplicación se alcanza una ~~dosis~~ concentración mínima requerida durante un tiempo especificado. En el Apéndice 2 se proporciona una lista de fumigantes de uso habitual y sus propiedades químicas.	**OIRSA** Aplicando los términos más apropiados al ámbito de aplicación de la norma presente. *Category : SUBSTANTIVE*
400	69	**4.2 Combinations ~~with other fumigants or~~**	**Costa Rica** To clarifity, and simplify the title

#	Para	Text	Comment
		treatments	*Category : TECHNICAL*
401	69	**4.2 Combinations with other fumigants or treatments**	**IPPC Regional Workshop Asia** Combinations with other fumigants might not be possible, if possible, please provide examples of fumigant combinations with appropriate dosage and target pest. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Viet Nam** Vietnam agreed with this APPPC comment. **Nepal** Support and agree to Regional Comment *Category : SUBSTANTIVE*
402	69	**4.2 Combinations ~~with other fumigants or~~ treatments**	**COSAVE** To clarify the types of treatments and simplify the title of the section *Category : EDITORIAL*
403	69	**4.2 Combinations ~~with other fumigants or~~ treatments**	**Peru** To clarify the type of treatment and to simplify the title of the section *Category : TECHNICAL*
404	69	**4.2 Combinations ~~with other fumigants or~~ treatments**	**Argentina** To clarify the type of treatment and to simplify the title of the section *Category : TECHNICAL*
405	69	**4.2 Combinations ~~with other fumigants or~~ treatments**	**Brazil** To clarify the type of treatment and to simplify the title of the section *Category : TECHNICAL*
406	69	**4.2 Combinations ~~with other fumigants or~~ treatments**	**Uruguay** To clarify the type of treatment and to simplify the title of the section *Category : TECHNICAL*
407	69	**4.2 Combinations with other fumigants or treatments**	**Singapore** To include examples of use of combinations with other fumigants/treatments in para 70 to be consistent with para 68 & 72 where examples had been provided. *Category : SUBSTANTIVE*
408	69	**4.2 Combinations with other fumigants or treatments**	**Philippines** Combinations with other fumigants might not be possible, if possible please provide examples of fumigant combinations with appropriate dosage and target pest. *Category : TECHNICAL*
409	69	**4.2 Combinaciones con otros fumigantes ~~o tratamientos~~**	**Panama** Se elimina porque se sale del ámbito de la competencia de la presente norma. *Category : TECHNICAL*
410	69	**4.2 Combinaciones con otros fumigantes ~~o tratamientos~~**	**OIRSA** Se elimina porque se sale del ámbito de la competencia de la presente norma. *Category : TECHNICAL*
411	70	Where a single fumigant treatments may not achieve the required efficacy without rendering the commodity unmarketable, or for reasons of economy or logistics, another fumigant or treatment may be included in the	**Peru** For consistency *Category : TECHNICAL*

#	Para	Text	Comment
		treatment schedule.	
412	70	Where a single fumigant treatment may not achieve the required efficacy without rendering the commodity unmarketable, or for reasons of economy or logistics, another fumigant or treatment may be included in the treatment schedule.	**Argentina** For consistency *Category : TECHNICAL*
413	70	Where a single fumigant treatment may not achieve the required efficacy without rendering the commodity unmarketable, or for reasons of economy or logistics, another fumigant or treatment may be included in the treatment schedule.	**Brazil** For consistency *Category : TECHNICAL*
414	70	Where a single fumigant may not achieve the required efficacy without rendering the commodity unmarketable, or for reasons of economy or logistics, another ~~fumigant or~~ non-chemical treatment may be included in the treatment schedule.	**India** *Category : SUBSTANTIVE*
415	70	Where a single fumigant may not achieve the required efficacy without rendering the commodity unmarketable, or for reasons of economy or logistics, ~~another fumigant~~ additional mitigations or ~~treatment~~ treatments may be included in the treatment schedule.	**United States of America** The United States is not aware of a treatment with two fumigants. *Category : SUBSTANTIVE*
416	70	Where a single fumigant treatment may not achieve the required efficacy without rendering the commodity unmarketable, or for reasons of economy or logistics, another fumigant or treatment may be included in the treatment schedule.	**Uruguay** For consistency *Category : TECHNICAL*
417	70	Where a single fumigant treatment may not achieve the required efficacy without rendering the commodity unmarketable, or for reasons of economy or logistics, another fumigant or treatment may be included in the treatment schedule.	**COSAVE** For consistency *Category : TECHNICAL*
418	70	Cuando no se pueda alcanzar el nivel de eficacia requerido con un único fumigante sin que el producto se vuelva no comerciable, o por razones económicas o logísticas, podrá incluirse otro fumigante ~~o tratamiento~~ en el protocolo de ~~tratamiento~~fumigación.	**Panama** Mejor comprensión del texto y en concordancia con toda la norma. *Category : TECHNICAL*
419	70	Cuando no se pueda alcanzar el nivel de eficacia requerido	**OIRSA** Mejor comprensión del texto y en concordancia con toda la norma.

#	Para	Text	Comment
		con un único fumigante sin que el producto se vuelva no comerciable, o por razones económicas o logísticas, podrá incluirse otro fumigante ~~o tratamiento~~ en el protocolo de ~~tratamiento~~fumigación.	*Category : TECHNICAL*
420	71	**4.2.1 Sequential combination treatments**	**Philippines** request for example of existing protocols, including treatment schedule (dosage, temperature, exposure period) and target pest. *Category : SUBSTANTIVE*
421	71	~~**4.2.1 Tratamientos combinados secuenciales**~~	**Panama** Se sale del ámbito de la norma *Category : SUBSTANTIVE*
422	71	~~**4.2.1 Tratamientos combinados secuenciales**~~	**OIRSA** Se sale del ámbito de la norma. *Category : SUBSTANTIVE*
423	72	Another treatment may be applied immediately before or after fumigation to increase the ~~effectiveness~~ efficacy of the entire treatment. For example, ~~temperature and~~ single fumigant and temperature treatments applied sequentially may be necessary where the host commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a temperature and fumigant combination treatment is fumigation with methyl bromide followed by a cold treatment.	**Costa Rica** Accepted from IPPC Regional Workshop LA *Category : TECHNICAL*
424	72	Another treatment may be applied immediately before or after fumigation to increase the ~~effectiveness~~ efficacy of the entire treatment. For example, ~~temperature and~~ single fumigant and temperature treatments applied sequentially may be necessary where the host commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a temperature and fumigant combination treatment is fumigation with methyl bromide followed by a cold treatment.	**IPPC Regional Workshop Latin America** For consistency and a better comprehension of the text, and to clarify that in general fumigation is applied before temperature treatments. *Category : TECHNICAL*
425	72	Another treatment may be applied immediately before or after fumigation to increase the effectiveness of the entire treatment. For example, temperature and fumigant treatments applied sequentially may be necessary where the	**IPPC Regional Workshop Asia** For environmental reasons, suggest to include a sentence to cap on possible treatment types per consignment. **APPPC** agreed by APPPC

#	Para	Text	Comment
		host commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a temperature and fumigant combination treatment is fumigation with methyl bromide followed by a cold treatment. However, the number of sequential treatments needs to be kept in a minimum possible treatment types per one consignment.	**Viet Nam** Vietnam agreed with this APPPC comment. **China** China agreed to this regional comments. **Thailand** Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. *Category : SUBSTANTIVE*
426	72	Another treatment may be applied immediately before or after a single fumigant fumigation treatment to increase the ~~effectiveness~~ efficacy of the ~~entire~~ treatment. For example, ~~temperature and~~ single fumigant and temperature treatments applied sequentially may be necessary where the ~~host~~ commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a ~~temperature and fumigant~~ sequential combination treatment is ~~fumigation~~ a single fumigant treatment with methyl bromide followed by a cold treatment.	**COSAVE** Changes suggested for consistency and better understanding of the text, and also to clarify that in general fumigation treatments are applied before temperature treatments *Category : TECHNICAL*
427	72	Another treatment may be applied immediately before or ~~after fumigation~~ after a single fumigant treatment to increase the ~~effectiveness~~ efficacy of the ~~entire~~ treatment. For example, ~~temperature~~ single and temperature fumigant treatments applied sequentially may be necessary where the host commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a ~~temperature and fumigant~~ sequential combination treatment is ~~fumigation~~ a single fumigant teatment with methyl bromide followed by a cold treatment.	**Peru** Changes suggested for consistency and better understanding of the text, and also to clarify that in general fumigation treatments are applied before temperature treatments *Category : TECHNICAL*
428	72	Another treatment may be applied immediately before or after ~~fumigation~~ a single fumigant treatment to increase the ~~effectiveness~~ efficacy of the ~~entire~~ treatment. For example, ~~temperature~~ single and temperature fumigant treatments applied sequentially may be necessary where the ~~host~~ commodity is vulnerable to damage from the increased	**Argentina** Changes suggested for consistency and better understanding of the text, and also to clarify that in general fumigation treatments are applied before temperature treatments *Category : TECHNICAL*

#	Para	Text	Comment
		severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a ~~temperature and fumigant~~ sequential combination treatment is ~~fumigation~~ a single fumigant treatment with methyl bromide followed by a cold treatment.	
429	72	Another treatment may be applied immediately before or after fumigation to increase the ~~effectiveness~~ efficacy of the entire treatment. For example, ~~temperature and~~ single fumigant and temperature treatments applied sequentially may be necessary where the host commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a temperature and fumigant combination treatment is fumigation with methyl bromide followed by a cold treatment.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 22:34 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
430	72	Another treatment may be applied immediately before or after ~~fumigation~~ a single fumigant treatment to increase the ~~effectiveness~~ efficacy of the ~~entire~~ treatment. For example, ~~temperature and~~ single fumigant and temperature treatments applied sequentially may be necessary where the ~~host~~ commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a ~~temperature and fumigant~~ sequential combination treatment is ~~fumigation~~ a single fumigant treatment with methyl bromide followed by a cold treatment.	**Brazil** Changes suggested for consistency and better understanding of the text, and also to clarify that in general fumigation treatments are applied before temperature treatments *Category : TECHNICAL*
431	72	Another treatment may be applied immediately before or after fumigation to increase the effectiveness of the entire treatment. For example, temperature and fumigant treatments applied sequentially may be necessary where the ~~host~~ commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. ~~An example of a temperature and fumigant combination treatment is fumigation with methyl~~	**EPPO** Useless and consistency with the rest of the standard. Whilst it is (still) necessary and legitimate to mention technical facts on MeBr, it seems unnecessary and contradictory to the CPM Recommendation to mention MeBr as an example *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~bromide followed by a cold treatment~~.	
432	72	Another treatment may be applied immediately before or after fumigation to increase the effectiveness of the entire treatment. For example, temperature and fumigant treatments applied sequentially may be necessary where the host commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments~~. An example of a temperature and fumigant combination treatment is fumigation with methyl bromide followed by a cold treatment~~.	**European Union** Whilst it is (still) necessary and legitimate to mention technical facts on MBr, it seems unnecessary and contradictory to the CPM Recommendation to mention MBr as an example. *Category : SUBSTANTIVE*
433	72	Another treatment may be applied immediately before or after fumigation to increase the effectiveness of the entire treatment. For example, temperature and fumigant treatments applied sequentially may be necessary where the ~~host~~ commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a temperature and fumigant combination treatment is fumigation with methyl bromide followed by a cold treatment.	**European Union** Useless and for consistency with the rest of the standard. *Category : EDITORIAL*
434	72	Another treatment may be applied immediately before or after ~~fumigation~~ a single fumigant treatment to increase the ~~effectiveness~~ efficacy of the ~~entire~~ treatment. For example, ~~temperature and~~ single fumigant and temperature treatments applied sequentially may be necessary where the ~~host~~ commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a ~~temperature and fumigant~~ sequential combination treatment is ~~fumigation~~ a single fumigant treatment with methyl bromide followed by a cold treatment.	**Uruguay** Changes suggested for consistency and better understanding of the text, and also to clarify that in general fumigation treatments are applied before temperature treatments *Category : TECHNICAL*
435	72	Another treatment may be applied immediately before or after fumigation to increase the effectiveness of the entire treatment. For example, temperature and fumigant	**Australia** Example adds nothing and example have not been included in other treatment type sections. *Category : EDITORIAL*

#	Para	Text	Comment
		treatments applied sequentially may be necessary where the host commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. ~~An example of a temperature and fumigant combination treatment is fumigation with methyl bromide followed by a cold treatment.~~	
436	72	Another treatment may be applied immediately before or after fumigation to increase the effectiveness of the entire treatment. For example, temperature and fumigant treatments applied sequentially may be necessary where the host commodity is vulnerable to damage from the increased severity required of either treatment alone, or where the most tolerant life stage of the target pest is different for the different treatments. An example of a temperature and fumigant combination treatment is fumigation with methyl bromide followed by a cold treatment~~.~~. However, the number of sequential treatments needs to be kept in a minimum possible treatment types per one consignment,	**Sri Lanka** *Category : SUBSTANTIVE*
437	72	~~Podrá aplicarse otro tratamiento inmediatamente antes o después de la fumigación para aumentar la eficacia del tratamiento completo. Por ejemplo, podrá ser necesaria la aplicación consecutiva de un tratamiento térmico y un fumigante cuando el producto hospedante sea susceptible de resultar dañado debido a la mayor intensidad requerida al aplicarse cualquiera de los tratamientos por separado, o cuando la etapa de desarrollo de la plaga objetivo más tolerante al tratamiento sea diferente para los distintos tratamientos. Un ejemplo de tratamiento combinado térmico y fumigante es la fumigación con bromuro de metilo seguida de un tratamiento con frío.~~	**Panama** Se sale del ámbito de la norma. *Category : SUBSTANTIVE*
438	72	~~Podrá aplicarse otro tratamiento inmediatamente antes o después de la fumigación para aumentar la eficacia del tratamiento completo. Por ejemplo, podrá ser necesaria la aplicación consecutiva de un tratamiento térmico y un fumigante cuando el producto hospedante sea susceptible de resultar dañado debido a la mayor intensidad requerida al aplicarse cualquiera de los tratamientos por separado, o~~	**OIRSA** Se sale del ámbito de la norma. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~cuando la etapa de desarrollo de la plaga objetivo más tolerante al tratamiento sea diferente para los distintos tratamientos. Un ejemplo de tratamiento combinado térmico y fumigante es la fumigación con bromuro de metilo seguida de un tratamiento con frío.~~	
439	73	**4.2.2 Concurrent combination treatments**	**European Union** It would be very useful to include an example of two fumigants and a fumigant and another treatment. *Category : TECHNICAL*
440	73	**4.2.2 Concurrent combination treatments**	**EPPO** It would be very useful to include an example of two fumigants and a fumigant and another treatment. *Category : TECHNICAL*
441	73	**4.2.2 Concurrent combination treatments**	**Oman** Need to give examples of such treatments that are currently used. *Category : SUBSTANTIVE*
442	73	**4.~~2.2~~3 Condiciones para realizar la fumigación~~Tratamientos combinados concurrentes~~**	**CA** Accepted from Latin American IPPC regional workshop *Category : TECHNICAL*
443	73	**4.~~2.2~~3 Condiciones para realizar la fumigación~~Tratamientos combinados concurrentes~~**	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
444	73	**4.2.2 Condiciones para realizar la fumigación~~Tratamientos combinados concurrentes~~**	**Panama** Elevar la jerarquía del párrafo, debido a que se habla de las condiciones en las que se debe de realizar la fumigación, por lo tanto se deberá de cambiar la numeración posterior al presente párrafo. *Category : SUBSTANTIVE*
445	73	**~~4.2.2~~5. Condiciones para realizar la fumigación ~~Tratamientos combinados concurrentes~~**	**OIRSA** Elevar la jerarquía del párrafo, debido a que se habla de las condiciones en las que se debe de realizar la fumigación, por lo tanto se deberá de cambiar la numeración posterior al presente párrafo. *Category : SUBSTANTIVE*
446	74	Concurrent combinations of a fumigant with other fumigants or treatments may be superior in efficacy, commodity tolerance, economics or logistics compared to treatment with a single fumigant alone. 4.3 Fumigation under special conditions Fumigation may be conducted under normal or modified conditions as follows	**Costa Rica** We suggest to include a new section 4.3 because following sections refer to conditions under which fumigation may be conducted *Category : TECHNICAL*
447	74	Concurrent combinations of a fumigant with other fumigants or treatments may be superior in efficacy, commodity tolerance, economics or logistics to treatment with a single fumigant alone.	**COSAVE** We suggest to include a new section 4.3 because following sections refer to conditions under which fumigation may be conducted *Category : TECHNICAL*

#	Para	Text	Comment
		4.3 Fumigation under special conditions Fumigation may be conducted under normal or modified conditions as follows	
448	74	Concurrent combinations of a single fumigant with other fumigants or treatments may ~~be superior in~~ increase efficacy, commodity tolerance, economics or logistics compared to ~~treatment with~~ a single fumigant alone.	**COSAVE** For consistency *Category : EDITORIAL*
449	74	Concurrent combinations of a fumigant with other fumigants or treatments may be superior in efficacy, commodity tolerance, economics or logistics to treatment with a single fumigant alone. **4.3 Fumigation under special conditions** Fumigation may be conducted under normal or modified conditions as follows	**Peru** We suggest to include a new section 4.3 because following sections refer to conditions under which fumigation may be conducted. *Category : TECHNICAL*
450	74	Concurrent combinations of a single fumigant with other fumigants or treatments may ~~be superior in~~ increase efficacy, commodity tolerance, economics or logistics compared to ~~treatment with~~ a single fumigant treatment alone.	**Argentina** For consistency *Category : TECHNICAL*
451	74	Concurrent combinations of a fumigant with other fumigants or treatments may be superior in efficacy, commodity tolerance, economics or logistics to treatment with a single fumigant alone. **4.3 Fumigation under special conditions** Fumigation may be conducted under normal or modified conditions as follows	**Argentina** We suggest to include a new section 4.3 because following sections refer to conditions under which fumigation may be conducted. *Category : TECHNICAL*
452	74	Concurrent combinations of a fumigant with other fumigants or treatments may be superior in efficacy, commodity tolerance, economics or logistics to treatment with a single fumigant alone.	**CA** Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*

#	Para	Text	Comment
		4.3 Special conditions for fumigation The fumigation may be conducted under normal or modified conditions, as follow:	
453	74	Concurrent combinations of a fumigant with other fumigants or treatments may be superior in efficacy, commodity tolerance, economics or logistics to treatment with a single fumigant alone. 4.3 Special conditions for fumigation The fumigation may be conducted under normal or modified conditions, as follow:	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
454	74	Concurrent combinations of a single fumigant treatment with other fumigants or treatments may ~~be superior in~~ increase efficacy, commodity tolerance, economics or logistics compared to ~~treatment with~~ a single fumigant alone. 4.3 Fumigation under special conditions Fumigation may be conducted under normal or modified conditions as follows	**Brazil** We suggest to include a new section 4.3 because following sections refer to conditions under which fumigation may be conducted. *Category : TECHNICAL*
455	74	Concurrent combinations of a fumigant with ~~other fumigants or~~ non-chemical treatments may be superior in efficacy, commodity tolerance, economics or logistics to treatment with a single fumigant alone.	**India** *Category : SUBSTANTIVE*
456	74	Concurrent combinations of a fumigant with other fumigants or treatments may be superior in efficacy, commodity tolerance, economics or logistics to treatment with a single fumigant alone. **4.3 Fumigation under special conditions** Fumigation may be conducted under normal or modified conditions as follows	**Uruguay** We suggest to include a new section 4.3 because following sections refer to conditions under which fumigation may be conducted. *Category : TECHNICAL*
457	74	Concurrent combinations of a single fumigant treatment	**Uruguay** For consistency

#	Para	Text	Comment
		with other fumigants or treatments may ~~be superior in~~ increase efficacy, commodity tolerance, economics or logistics compared to ~~treatment with~~ a single fumigant alone.	*Category : TECHNICAL*
458	74	Concurrent combinations of a fumigant with other fumigants or treatments may be superior in efficacy, commodity tolerance, economics or logistics to treatment with a single fumigant alone.	**Sri Lanka** By the word "concurrent" may be misleading as a cocktail of treatments. i.e. mixing of few chemicals together and application. This type of applications needs to be studied further since the impact (health and environmental) is unknown. Therefore, the text needs to be more focussed on what is meant by "concurrent"). If the treatments are applied separately, there may be always a sequence of application. In that sense, we feel that 4.2 can be removed and 4.2.1 could be renumbered as 4.2 *Category : SUBSTANTIVE*
459	74	Las combinaciones concurrentes de un fumigante con otros fumigantes o tratamientos podrán ~~ser mejores que el tratamiento con un único fumigante en cuanto a~~ incrementar la eficacia, tolerancia del producto, economía o ~~logística~~logística que un tratamiento simple.	**Colombia** De acuerdo a lo aprobado en el Taller Regional. *Category : TECHNICAL*
460	74	~~Las combinaciones concurrentes de un fumigante con otros fumigantes~~ La fumigación se puede realizar bajo condiciones normales o ~~tratamientos podrán ser mejores que el tratamiento con un único fumigante en cuanto a eficacia, tolerancia del producto, economía o logística.~~modificadas encontrándose entre estas las siguientes:	**CA** Accepted from Latin American IPPC regional workshop *Category : TECHNICAL*
461	74	~~Las combinaciones concurrentes de un fumigante con otros fumigantes~~ La fumigación se puede realizar bajo condiciones normales o ~~tratamientos podrán ser mejores que el tratamiento con un único fumigante en cuanto a eficacia, tolerancia del producto, economía o logística.~~modificadas encontrándose entre estas las siguientes:	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
462	74	~~Las combinaciones concurrentes de un fumigante con otros fumigantes o tratamientos podrán ser mejores que el tratamiento con un único fumigante en cuanto a eficacia, tolerancia del producto, economía o logística.~~La fumigación se puede realizar bajo condiciones normales o condiciones modificadas, encontrándose entre estas las siguientes	**Panama** un encabezado más enfocado al desglose posterior *Category : EDITORIAL*
463	74	~~Las combinaciones concurrentes de un fumigante con otros fumigantes~~ la fumigación se puede realizar bajo condiciones normales o ~~tratamientos podrán ser mejores~~	**OIRSA** *Category : TECHNICAL*

#	Para	Text	Comment
		~~que el tratamiento con un único fumigante en cuanto a eficacia~~condiciones modificadas, ~~tolerancia del producto, economía o logística.~~encontrándose entre estas las siguientes:	
464	75	***4.~~2~~3.~~2.~~1Fumigation under ~~Fumigant and~~ modified a~~tmosphere c~~tmosphere~~ombination treatments***	**Costa Rica** Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
465	75	***4.~~2~~3.~~2.~~1Fumigation under ~~Fumigant and~~ modified a~~tmosphere c~~tmosphere~~ombination treatments***	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
466	75	***4.~~2~~3.~~2.~~1 Fumigation treatment under ~~Fumigant and~~ modified atmosphere ~~combination treatments~~***	**COSAVE** For consistency with title of section 4.2.2.2. Numbering of section modified as a consequential change according comments in paragraph 74. *Category : TECHNICAL*
467	75	***4.~~2~~3.~~2.~~1Fumigation treatment under~~Fumigant and~~ modified ~~a~~atmosphere~~tmosphere combination treatments~~***	**Peru** For consistency with title of section 4.2.2.2. Numbering of section modified as a consequential change according comments in paragraph 74. *Category : TECHNICAL*
468	75	***4.~~2~~3.~~2.~~1~~Fumigant and~~ Fumigation treatment under modified a~~tmosphere c~~tmosphere~~ombination treatments~~***	**Argentina** For consistency with title of section 4.2.2.2. Numbering of section modified as a consequential change according comments in paragraph 74. *Category : TECHNICAL*
469	75	***4.~~2~~3.~~2.~~1Fumigation under ~~Fumigant and~~ modified a~~tmosphere c~~tmosphere~~ombination treatments~~***	**CA** Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
470	75	***4.~~2.2.~~1 Fumigation treatment under~~Fumigant and~~ modified atmosphere ~~combination treatments~~***	**Brazil** For consistency with title of section 4.2.2.2. Numbering of section modified as a consequential change according comments in paragraph 74. *Category : TECHNICAL*
471	75	***4.2.2.1 Fumigant and modified atmosphere combination treatments***	**United States of America** Note this is not a fumigation treatment. This should be discussed in the Modified Atmosphere ISPM rather than in this fumigation ISPM *Category : TECHNICAL*
472	75	***4.~~2~~3.~~2.~~1Fumigation treatment under~~Fumigant and~~ modified a~~tmosphere c~~tmosphere~~ombination treatments~~***	**Uruguay** For consistency with title of section 4.2.2.2. Numbering of section modified as a consequential change according comments in paragraph 74. *Category : TECHNICAL*
473	75	***4.~~2~~3.~~2.~~1~~Tratamientos combinados de fumigante y~~ Fumigación en atmósfera modificada***	**CA** Accepted from Latin American IPPC regional workshop *Category : TECHNICAL*
474	75	***4.~~2~~3.~~2.~~1~~Tratamientos combinados de fumigante y~~ Fumigación en atmósfera modificada***	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
475	75	***~~4~~5.~~2.2.~~1~~Tratamientos combinados de fumigante y~~ Fumigación en atmósfera modificada***	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia. *Category : TECHNICAL*

#	Para	Text	Comment
476	75	***~~4~~5.~~2.2.1~~1 Fumigación en atmósfera modificada*** ***~~Tratamientos combinados de fumigante y atmósfera modificada~~***	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia. *Category : TECHNICAL*
477	76	Increasing atmospheric carbon dioxide in the fumigation enclosure, either alone or in combination with increasing nitrogen and decreasing oxygen levels, may be used to increase fumigation treatment efficacy. Changing the atmosphere in this way may directly enhance target pest mortality or may increase target pest respiration thereby increasing the efficacy of fumigants such as phosphine. Reducing levels of oxygen through containing non-flammable gases such as carbon dioxide and nitrogen in the atmosphere may also be necessary where the fumigant is flammable, such as is the case with ethyl formate.	**IPPC Regional Workshop Asia** to include "through containing non-flammable gases such as carbon dioxide and nitrogen" . **APPPC** agreed by APPPC **Viet Nam** Vietnam agreed with this APPPC comment. **Thailand** Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. **Japan** Japan support regional comment. *Category : SUBSTANTIVE*
478	76	Increasing atmospheric carbon dioxide in the fumigation enclosure, either alone or in combination with increasing nitrogen and decreasing or increasing atmospheric oxygen levels, may be used to increase fumigation treatment efficacy. Changing the atmosphere in this way may directly enhance target pest mortality or may increase target pest respiration thereby increasing the efficacy of fumigants such as phosphine. Reducing levels of oxygen in the atmosphere may also be necessary where the fumigant is flammable, such as is the case with ethyl formate.	**Canada** *Category : TECHNICAL*
479	76	Increasing atmospheric carbon dioxide in the fumigation enclosure, either alone or in combination with increasing nitrogen and decreasing oxygen levels, may be used to increase fumigation treatment efficacy. Changing the atmosphere in this way may directly enhance target pest mortality or may increase target pest respiration thereby increasing the efficacy of fumigants such as phosphine. Reducing levels of oxygen in the atmosphere (e.g. containing non-flammable gases such as carbon dioxide and nitrogen) may also be necessary where the fumigant is flammable, such as is the case with ethyl formate.	**Japan** Add technical information to make it easier to implement the standard. *Category : TECHNICAL*
480	76	Increasing atmospheric carbon dioxide in the fumigation enclosure, either alone or in combination with increasing	**Australia** Remove examples, the statements are clear without them. *Category : EDITORIAL*

#	Para	Text	Comment
		nitrogen and decreasing oxygen levels, may be used to increase fumigation treatment efficacy. Changing the atmosphere in this way may directly enhance target pest mortality or may increase target pest respiration thereby increasing the efficacy of ~~fumigants such as phosphine~~fumigants. Reducing levels of oxygen in the atmosphere may also be necessary where the fumigant is flammable~~, such as is the case with ethyl formate~~.	
481	76	Increasing atmospheric carbon ~~dioxide~~dioxide concentration in the fumigation enclosure, either alone or in combination with increasing nitrogen and decreasing oxygen ~~levels,~~ concentrations may be used to increase fumigation treatment efficacy. Changing the atmosphere in this way may directly enhance target pest mortality or may increase target pest respiration thereby increasing the efficacy of fumigants such as phosphine. Reducing ~~levels~~ concentration of oxygen in the atmosphere may also be necessary where the fumigant is flammable, such as is the case with ethyl formate.	**Thailand** *Category : EDITORIAL*
482	76	Increasing atmospheric carbon dioxide~~-~~ levels in the fumigation enclosure, either alone or in combination with increasing nitrogen and decreasing oxygen levels, may be used to increase fumigation treatment efficacy. Changing the atmosphere in this way may directly enhance target pest mortality or may increase target pest respiration thereby increasing the efficacy of fumigants such as phosphine. Reducing levels of oxygen in the atmosphere may also be necessary where the fumigant is flammable, such as is the case with ethyl formate.	**Singapore** Inclusion of "levels" to reflect better clarity of this sentence. *Category : EDITORIAL*
483	76	Increasing atmospheric carbon dioxide in the fumigation enclosure, either alone or in combination with increasing nitrogen and decreasing oxygen levels, may be used to increase fumigation treatment efficacy. Changing the atmosphere in this way may directly enhance target pest mortality or may increase target pest respiration thereby increasing the efficacy of fumigants such as phosphine. Reducing levels of oxygen in the atmosphere may also be necessary where the fumigant is flammable, such as is the	**Micronesia** Changing atmosphere with atmospheric conditions *Category : SUBSTANTIVE*

#	Para	Text	Comment
		case with ethyl formate.	
484	76	Increasing atmospheric carbon dioxide in the fumigation enclosure, either alone or in combination with increasing nitrogen and decreasing oxygen levels, may be used to increase fumigation treatment efficacy. Changing the ~~atmosphere~~ atmospheric conditions in this way may directly enhance target pest mortality or may increase target pest respiration thereby increasing the efficacy of fumigants such as phosphine. Reducing levels of oxygen in the atmosphere may also be necessary where the fumigant is flammable, such as is the case with ethyl formate.	**PPPO** change word atmosphere to atmospheric conditions? *Category : SUBSTANTIVE*
485	77	***4.~~2~~3.2.~~2~~Fumigation treatment under vacuum***	**Costa Rica** For consistency. Numbering of section modified as a consequential change according comment in paragraph 74 *Category : TECHNICAL*
486	77	***4.~~2~~3.2.~~2~~Fumigation treatment under vacuum***	**COSAVE** For consistency. Numbering of section modified as a consequential change according comment in paragraph 74 *Category : TECHNICAL*
487	77	***4.~~2~~3.2.~~2~~Fumigation treatment under vacuum***	**Peru** For consistency. Numbering of section modified as a consequential change according comment in paragraph 74 *Category : TECHNICAL*
488	77	***4.2.2.2 Fumigation treatment under vacuum***	**Argentina** For consistency. Numbering of section modified as a consequential change according comment in paragraph 74 *Category : TECHNICAL*
489	77	***4.2.2.2 Vacuum ~~Fumigation under vacuum~~ Fumigation***	**Japan** The information of the text may be better to use the term "Vacuum Fumigation" because the term "Vacuum Fumigation" is used in "FAO Manual of fumigation for insect control. (http://www.fao.org/docrep/x5042e/x5042E00.htm#Contents) *Category : EDITORIAL*
490	77	***4.~~2~~3.2.~~2~~Fumigation under vacuum***	**CA** Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
491	77	***4.~~2~~3.2.~~2~~Fumigation under vacuum***	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
492	77	***4.2.~~2.2~~ Fumigation treatment under vacuum***	**Brazil** For consistency. Numbering of section modified as a consequential change according comment in paragraph 74 *Category : TECHNICAL*
493	77	***4.~~2~~3.2.~~2~~Fumigation treatment under vacuum***	**Uruguay** For consistency. Numbering of section modified as a consequential change according comment in paragraph 74

#	Para	Text	Comment
			Category : TECHNICAL
494	77	***4.~~23~~.2.~~2~~Fumigación en vacío***	**CA** Accepted from Latin American IPPC regional workshop *Category : TECHNICAL*
495	77	***4.~~23~~.2.~~2~~Fumigación en vacío***	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
496	77	***~~4~~5.~~2.2.2~~2 Fumigación en vacío***	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia. *Category : EDITORIAL*
497	77	***~~4~~5.~~2.2.2~~2 Fumigación en vacío ~~Fumigación en vacío~~***	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia. *Category : EDITORIAL*
498	78	~~Appling~~ Applying a fumigant under a partial atmospheric vacuum can significantly increase the rate of fumigant penetration into a commodity, resulting in increased efficacy or the ability to reduce fumigant ~~quantity~~ dosage or duration of treatment. Such treatments should be carried out in purpose-built vacuum chambers that allow minimal vacuum loss during the fumigation, and using a vacuum pump capable of attaining the atmospheric pressure required within the time frame required.	**IPPC Regional Workshop Asia** to replace quantity with dosage and correct spelling for applying. **APPPC** agreed by APPPC **Viet Nam** Vietnam agreed with this APPPC comment. **China** China agreed to this regional comments. **Thailand** Thailand agree with APPPC comment. **Korea, Republic of** Republic of Korea agree with APPPC comment. **India** agree to comments *Category : SUBSTANTIVE*
499	78	Appling a fumigant under ~~a partial~~ atmospheric vacuum can significantly increase the rate of fumigant penetration into a commodity, resulting in increased efficacy or ~~the ability to reduce~~ in reducing fumigant quantity or duration of treatment. Such treatments should be carried out in purpose-built vacuum chambers are usually of welded steel construction that ~~allow minimal vacuum loss during~~ are capable of withstanding the ~~fumigation~~difference in pressures when the vacuum is drawn, and using a vacuum pump capable of attaining the atmospheric pressure required within the time frame required.	**Japan** -Editorial -Delete "allow minimal vacuum loss during the fumigation" because of inappropriate information. It is useful for ISPMs users to include this information about specialized features for vacuum fumigation in the text. *Category : TECHNICAL*
500	78	~~Appling~~ Applying a fumigant under a partial atmospheric vacuum can significantly increase the rate of fumigant penetration into a commodity, resulting in increased efficacy or the ability to reduce fumigant quantity or duration of treatment. Such treatments should be carried out	**European Union** Correct spelling and more appropriate word. *Category : EDITORIAL*

#	Para	Text	Comment
		in purpose-built vacuum chambers that ~~allow~~ ensure minimal vacuum loss during the fumigation, and using a vacuum pump capable of attaining the atmospheric pressure required within the time frame required.	
501	78	~~Appling~~ Applying a fumigant under a partial atmospheric vacuum can significantly increase the rate of fumigant penetration into a commodity, resulting in increased efficacy or the ability to reduce fumigant quantity or duration of treatment. Such treatments should be carried out in purpose-built vacuum chambers that ~~allow~~ ensure minimal vacuum loss during the fumigation, and using a vacuum pump capable of attaining the atmospheric pressure required within the time frame required.	**EPPO** Correct spelling and more appropriate word *Category : EDITORIAL*
502	78	Appling a fumigant under a partial atmospheric vacuum can significantly increase the rate of fumigant penetration into a commodity, resulting in increased efficacy or the ability to reduce fumigant ~~quantity~~ dosage or duration of treatment. Such treatments should be carried out in purpose-built vacuum chambers that allow minimal vacuum loss during the fumigation, and using a vacuum pump capable of attaining the atmospheric pressure required within the time frame required.	**China** A lower dose is equivalent to reducing the amount of fumigant used. Usually, the dosage is reduced. *Category : SUBSTANTIVE*
503	78	~~Appling~~ Applying a fumigant under a partial atmospheric vacuum can significantly increase the rate of fumigant penetration into a commodity, resulting in increased efficacy or the ability to reduce fumigant quantity or duration of treatment. Such treatments should be carried out in purpose-built vacuum chambers that allow minimal vacuum loss during the fumigation, and using a vacuum pump capable of attaining the atmospheric pressure required within the time frame required.	**Singapore** Replacing " Appling" with "Applying". *Category : EDITORIAL*
504	78	~~Appling~~ Applying a fumigant under a partial atmospheric vacuum can significantly increase the rate of fumigant penetration into a commodity, resulting in increased efficacy or the ability to reduce fumigant quantity or duration of treatment. Such treatments should be carried out in purpose-built vacuum chambers that allow minimal	**Philippines** *Category : EDITORIAL*

#	Para	Text	Comment
		vacuum loss during the fumigation, and using a vacuum pump capable of attaining the atmospheric pressure required within the time ~~frame required~~frame.	
505	78	Appling a fumigant under a partial atmospheric vacuum can significantly increase the rate of fumigant penetration into a commodity, resulting in increased efficacy or the ability to reduce fumigant quantity or duration of treatment. Such treatments should be carried out in purpose-built vacuum chambers that allow minimal vacuum loss during the fumigation, and using a vacuum pump capable of attaining the atmospheric pressure required within the time frame required.	**Micronesia** Replacing Appling with Applying *Category : EDITORIAL*
506	78	~~Appling~~ Applying a fumigant under a partial atmospheric vacuum can significantly increase the rate of fumigant penetration into a commodity, resulting in increased efficacy or the ability to reduce fumigant quantity or duration of treatment. Such treatments should be carried out in purpose-built vacuum chambers that allow minimal vacuum loss during the fumigation, and using a vacuum pump capable of attaining the atmospheric pressure required within the time frame required.	**PPPO** Appling to Applying? *Category : EDITORIAL*
507	78	La aplicación de un fumigante en condiciones de vacío atmosférico parcial puede aumentar significativamente la tasa de penetración del fumigante en el producto, mejorándose su eficacia o haciendo posible reducir la cantidad de fumigante o la duración del tratamiento. Estos tratamientos deberían realizarse en cámaras de vacío diseñadas ~~ex profeso~~ para tal fin en las que la pérdida de vacío durante la fumigación sea mínima y empleando una bomba de vacío que permita alcanzar la presión atmosférica necesaria en el plazo requerido.	**Panama** Mejor redacción del texto *Category : EDITORIAL*
508	78	La aplicación de un fumigante en condiciones de vacío atmosférico parcial puede aumentar significativamente la tasa de penetración del fumigante en el producto, mejorándose su eficacia o haciendo posible reducir la cantidad de fumigante o la duración del tratamiento. Estos tratamientos deberían realizarse en cámaras de vacío	**Colombia** Mejor redacción y claridad en el texto. *Category : EDITORIAL*

#	Para	Text	Comment
		diseñadas ~~ex profeso~~ específicamente para tal fin, en las que la pérdida de vacío durante la fumigación sea mínima y empleando una bomba de vacío que permita alcanzar la presión atmosférica necesaria en el plazo requerido.	
509	78	La aplicación de un fumigante en condiciones de vacío atmosférico parcial puede aumentar significativamente la tasa de penetración del fumigante en el producto, mejorándose su eficacia o haciendo posible reducir la cantidad de fumigante o la duración del tratamiento. Estos tratamientos deberían realizarse en cámaras de vacío diseñadas ~~ex profeso~~ para tal fin en las que la pérdida de vacío durante la fumigación sea mínima y empleando una bomba de vacío que permita alcanzar la presión atmosférica necesaria en el plazo requerido.	**OIRSA** Mejor redacción del texto. *Category : EDITORIAL*
510	79	**5. Fumigation Enclosures and Equipment**	**Ozone Secretariat** The document would be a better read if the advice in this section was embedded within section six Fumigation Procedures. *Category : SUBSTANTIVE*
511	79	**5. Fumigation Enclosures and Equipment**	**United States of America** Suggest "enclosures" be defined. Would tarp treatments be considered enclosures? *Category : TECHNICAL*
512	79	**~~5~~6. Equipo y recintos de fumigación**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
513	79	**~~5~~6. Equipo y recintos de fumigación**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
514	80	There are many potential ~~forms~~ types and designs for equipment and enclosures used ~~in fumigation~~apply fumigation treatment. These will vary depending on the type of fumigant used, the nature of the commodity, and the conditions of the surrounding environment. The following enclosures and equipment may be necessary to ensure that a fumigation achieves the required efficacy.	**Costa Rica** To consistency *Category : EDITORIAL*
515	80	There are many potential forms and designs for equipment and enclosures used in fumigation. These will vary depending on the type of fumigant used, the nature of the commodity, and the conditions of the surrounding environment. The following ~~enclosures and equipment~~	**Canada** *Category : EDITORIAL*

#	Para	Text	Comment
		parameters may be necessary to consider to ensure that a fumigation achieves the required efficacy.	
516	80	There are many potential ~~forms~~ types and designs for equipment and enclosures used ~~in fumigation~~apply fumigation treatments. These will vary depending on the type of fumigant used, the nature of the commodity, and the conditions of the surrounding environment. The following enclosures and equipment may be necessary to ensure that a fumigation achieves the required efficacy.	**Peru** For consistency *Category : TECHNICAL*
517	80	There are many potential ~~forms~~ types and designs for equipment and enclosures used ~~in fumigation~~to apply fumigation treatments. These will vary depending on the type of fumigant used, the nature of the commodity, and the conditions of the surrounding environment. The following enclosures and equipment may be necessary to ensure that a fumigation achieves the required efficacy.	**Argentina** For consistency *Category : EDITORIAL*
518	80	There are many potential forms and designs for equipment and enclosures used in fumigation. These ~~will~~ vary depending on the type of fumigant used, the nature of the commodity, and the conditions of the surrounding environment. The following enclosures and equipment may be necessary to ensure that a fumigation achieves the required efficacy.	**European Union** Unnecessary word removed. *Category : EDITORIAL*
519	80	There are many potential ~~forms~~ types and designs for equipment and enclosures used ~~in fumigation~~to apply fumigation treatments. These will vary depending on the type of fumigant used, the nature of the commodity, and the conditions of the surrounding environment. The following enclosures and equipment may be necessary to ensure that a fumigation achieves the required efficacy.	**Brazil** For consistency *Category : EDITORIAL*
520	80	There are many potential forms and designs for equipment and enclosures used in fumigation. ~~These will~~ These vary depending on the type of fumigant used, the nature of the commodity, and the conditions of the surrounding environment. The following enclosures and equipment may be necessary to ensure that a fumigation achieves the required efficacy.	**EPPO** unnecessary *Category : EDITORIAL*

#	Para	Text	Comment
521	80	There are many potential forms and designs for equipment and enclosures used in fumigation. These will vary depending on the type of fumigant used, the nature of the commodity, target pest, and the conditions of the surrounding environment. The following enclosures and equipment may be necessary to ensure that a fumigation achieves the required efficacy.	**India** *Category : TECHNICAL*
522	80	There are many potential ~~forms~~ types and designs for equipment and enclosures used ~~in fumigation~~to apply fumigation treatments. These will vary depending on the type of fumigant used, the nature of the commodity, and the conditions of the surrounding environment. The following enclosures and equipment may be necessary to ensure that a fumigation achieves the required efficacy.	**Uruguay** For consistency *Category : EDITORIAL*
523	80	There are many potential forms and designs for equipment and enclosures used in fumigation. These will vary depending on the type of fumigant used, the nature of the commodity, and the conditions of the surrounding environment. The following enclosures and equipment may be necessary to ensure that a fumigation achieves the required efficacy.	**Vanuatu** agree *Category : EDITORIAL*
524	80	There are many potential ~~forms~~ types and designs for equipment and enclosures used ~~in fumigation~~to apply fumigation treatments. These will vary depending on the type of fumigant used, the nature of the commodity, and the conditions of the surrounding environment. The following enclosures and equipment may be necessary to ensure that a fumigation achieves the required efficacy.	**COSAVE** For consistency *Category : EDITORIAL*
525	80	El equipo y los recintos utilizados para la fumigación pueden tener formas y diseños muy diversos, que varían en función del tipo de fumigante que se utilice, la naturaleza del producto y las condiciones del ~~entorno~~ ambiente circundante. Para garantizar que la fumigación alcanza el nivel de eficacia requerido podrán ser necesarios los siguientes recintos y equipo.	**Panama** Termino más apropiado al idioma español. *Category : EDITORIAL*
526	80	El equipo y los recintos utilizados para la fumigación pueden tener formas y diseños muy diversos, que varían en	**OIRSA** Termino más apropiado al idioma español. *Category : EDITORIAL*

#	Para	Text	Comment
		función del tipo de fumigante que se utilice, la naturaleza del producto y las condiciones del ~~entorno~~ ambiente circundante. Para garantizar que la fumigación alcanza el nivel de eficacia requerido podrán ser necesarios los siguientes recintos y equipo.	
527	81	~~5.1 Recinto de fumigación~~6.1 Recinto de fumigación	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
528	81	~~5~~6.1 **Recinto de fumigación**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
529	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are ~~unlikely to provide~~ not a suitable floor for a tent fumigation enclosure.	**Costa Rica** Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
530	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are ~~unlikely to provide~~ not a suitable floor for a tent fumigation enclosure.	**IPPC Regional Workshop Latin America** these materials should not be used and should be mentioned specifically in the draft. *Category : TECHNICAL*
531	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate	**IPPC Regional Workshop Asia** Addition of ", while protecting the environment from seepage of fumigant." **APPPC**

#	Para	Text	Comment
		fumigation conditions are maintained throughout the duration of the fumigation, while protecting the environment from seepage of fumigant. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	agreed by APPPC **Viet Nam** Vietnam agreed with this APPPC comment. **Thailand** Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. **Nepal** Support and agree to Regional Comment **India** agree to comments **Japan** Japan support regional comment. *Category : SUBSTANTIVE*
532	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period and prevent fumigant escape (e.g. materials that are sturdy and puncture proof, not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	**Canada** *Category : TECHNICAL*
533	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the ~~fumigation~~treatment. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are ~~unlikely to provide a~~ not suitable floor for a tent fumigation enclosure.	**Peru** These materials should not be used and this should be specifically mentioned in the draft. *Category : TECHNICAL*
534	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate	**Ozone Secretariat** Fumigation on a soil base is possible if sealed with a cover first.

#	Para	Text	Comment
		fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure unless the tarpaulin is underneath the commodity to seal the enclosure.	*Category : TECHNICAL*
535	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are ~~unlikely to provide a~~ not suitable floor for a tent fumigation enclosure.	**Argentina** These materials should not be used and this should be specifically mentioned in the draft. *Category : TECHNICAL*
536	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the ~~fumigation~~treatment. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	**Argentina** For better reading *Category : EDITORIAL*
537	82	A fumigation enclosure should be a space that can be enclosed in a manner ~~that~~ to ensures that appropriate fumigation conditions are maintained throughout the	**Japan** Added ship holds as a example of enclosure. *Category : TECHNICAL*

#	Para	Text	Comment
		duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, ~~warehouses~~ warehouses, ship holds or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	
538	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are ~~unlikely to provide~~ not a suitable floor for a tent fumigation enclosure.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 23:15 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
539	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the ~~fumigant)~~fumigant) and openings should be effectively sealed. Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	**European Union** Important technical addition. *Category : TECHNICAL*
540	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the ~~fumigation~~treatment. Examples of	**Brazil** For better reading. These materials should not be used and this should be specifically mentioned in the draft. *Category : EDITORIAL*

#	Para	Text	Comment
		enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are ~~unlikely to provide a~~ not suitable floor for a tent fumigation enclosure.	
541	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the ~~fumigant)~~fumigant) and openings should be effectively sealed. Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	**EPPO** Important technical addition *Category : TECHNICAL*
542	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, ~~warehouses~~ warehouses, vessels, or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base ~~rock~~ rock, wood and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	**United States of America** Second sentence: suggest adding "vessels". Also suggest defining tarpaulin "tents". There are only tarp treatments. USDA separates tarp treatments from enclosure treatments. Last sentence: Suggest adding "wood" *Category : TECHNICAL*
543	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight	**New Zealand** funigation is possible if covered first *Category : TECHNICAL*

#	Para	Text	Comment
		containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure unless the tarpaulin is underneath the commodity to seal the enclosure.	
544	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the ~~fumigation~~treatment. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	**Uruguay** For better reading *Category : EDITORIAL*
545	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are ~~unlikely to provide a~~ not suitable floor for a tent fumigation enclosure.	**Uruguay** These materials should not be used and this should be specifically mentioned in the draft. *Category : TECHNICAL*
546	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation~~. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents".~~ . The enclosure	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*

#	Para	Text	Comment
		should be constructed from materials that maintain adequate fumigant concentrations over the fumigation ~~period~~ ~~(e.g~~period. ~~materials that are not porous or absorbent to the fumigant).~~ Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	
547	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation, while protecting the environment from seepage of fumigant. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	**Sri Lanka** *Category : SUBSTANTIVE*
548	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the fumigation. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are ~~unlikely to provide~~ not a suitable floor for a tent fumigation enclosure.	**COSAVE** these materials should not be used and should be mentioned specifically in the draft. *Category : TECHNICAL*
549	82	A fumigation enclosure should be a space that can be enclosed in a manner that ensures that appropriate fumigation conditions are maintained throughout the duration of the ~~fumigation~~treatment. Examples of enclosures include purpose-built fumigation chambers, silos, freight containers, warehouses or tarpaulin "tents". The enclosure should be constructed from materials that	**COSAVE** For better reading. *Category : EDITORIAL*

#	Para	Text	Comment
		maintain adequate fumigant concentrations over the fumigation period (e.g. materials that are not porous or absorbent to the fumigant). Surfaces such as soil, sand, base rock and paving (stones or blocks) are unlikely to provide a suitable floor for a tent fumigation enclosure.	
550	82	Un recinto de fumigación debería ser un espacio que se pueda cerrar de tal manera que se garantice el mantenimiento de ~~unas~~ las condiciones ~~de fumigación~~ adecuadas durante la fumigación. Son ejemplos de recintos las cámaras diseñadas ~~ex profeso~~ para la fumigación, los silos, los contenedores, los almacenes o las "carpas" de lona alquitranada. El recinto debería estar construido con materiales que mantengan una concentración de fumigante adecuada durante el período de fumigación (materiales que no sean porosos ~~al fumigante~~ ni ~~lo absorban)~~absorban al fumigante). Es poco probable que superficies como ~~el~~ suelo, ~~la~~ arena, ~~la piedra machacada~~ grava o el ~~pavimento~~ adoquinado (piedras o bloques) sean adecuadas como piso de una carpa utilizada como recinto de fumigación.	**Panama** Términos más apropiados. *Category : EDITORIAL*
551	82	Un recinto de fumigación debería ser un espacio que se pueda cerrar de tal manera que se garantice el mantenimiento de unas condiciones de fumigación adecuadas durante la fumigación. Son ejemplos de recintos las cámaras diseñadas ~~ex profeso~~ específicamente para tal fin, para la fumigación, los silos, los contenedores, los almacenes o las "carpas" de lona alquitranada. El recinto debería estar construido con materiales que mantengan una concentración de fumigante adecuada durante el período de fumigación (materiales que no sean porosos al fumigante ni lo absorban). Es poco probable que superficies como el suelo, la arena, la piedra machacada o el pavimento (piedras o bloques) sean adecuadas como piso de una carpa utilizada como recinto de fumigación.	**Colombia** Mejor redacción y claridad en el texto. *Category : EDITORIAL*
552	82	Un recinto de fumigación debería ser un espacio que se pueda cerrar de tal manera que se garantice el mantenimiento de ~~unas~~ las condiciones ~~de fumigación~~ adecuadas durante la fumigación. Son ejemplos de recintos las cámaras diseñadas ~~ex profeso~~ para la fumigación, los	**OIRSA** Términos más apropiados. *Category : EDITORIAL*

#	Para	Text	Comment
		silos, los contenedores, los almacenes o las "carpas" de lona alquitranada. El recinto debería estar construido con materiales que mantengan una concentración de fumigante adecuada durante el período de fumigación (materiales que no sean ~~porosos al fumigante~~ porosos, ni ~~lo absorban)~~absorban al fumigante). Es poco probable que superficies como ~~el~~ suelo, ~~la~~ arena, ~~la piedra machacada~~ grava o el ~~pavimento~~ adoquinado (piedras o bloques) sean adecuadas como piso de una carpa utilizada como recinto de fumigación.	
553	83	All enclosures should be designed to allow adequate access for the equipment that is required to verify that the fumigation has been ~~applied~~ conducted appropriately.	**Canada** *Category : EDITORIAL*
554	83	All enclosures should be designed to allow adequate access for the equipment that is required to verify that the fumigation has been applied appropriately.	**United States of America** Tarp treatments are not enclosure treatments. See United States comment on paragraph 82. *Category : TECHNICAL*
555	84	**5.1.1 Pressure testing the enclosure**	**IPPC Regional Workshop Asia** The title of section 5.1.1 may be removed. The detail under this subheading is more suitable to be placed under section 6.5 Gas tightness test. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Viet Nam** Vietnam agreed with this APPPC comment. **China** China agreed to this regional comments. **Nepal** Support and agree to Regional Comment *Category : SUBSTANTIVE*
556	84	**5.1.1 Pressure testing the ~~enclosure~~sealed chamber or container**	**United States of America** You cannot pressure test a tarped commodity. See United States comment on paragraph 82 *Category : TECHNICAL*
557	84	~~**5.1.1 Pressure testing the enclosure**~~	**Australia** This paragraph is repeated later on in 6.5 and 6.5 is the most appropriate location for this. *Category : TECHNICAL*
558	84	~~**5.1.1 Pressure testing the enclosure**~~	**Thailand** The title of section 5.1.1 may be removed. The detail under this subheading is more suitable to be placed under section 6.5 Gas tightness test. *Category : SUBSTANTIVE*
559	84	**~~5~~6.1.1 Prueba de presión en el recinto**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas.

#	Para	Text	Comment
			Category : EDITORIAL
560	84	~~5~~6.1.1 **Prueba de presión en el recinto**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
561	85	Where the gas ~~tightness~~ tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure decay time of ten seconds or more (air pressure decaying from 200 Pa to 100 Pa) should be considered suitably gas tight for methyl bromide fumigations.	**Costa Rica** traducir como hermeticidad, y en los caos de tight como "hermetico" "tightness" should be translated as "hermeticidad" "tight" should be translated as "hermético" *Category : TRANSLATION*
562	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure ~~decay~~ decreasing time of ten seconds or more (air pressure decaying from 200 Pa to 100 Pa) should be considered suitably gas tight for methyl bromide fumigations~~.~~.	**IPPC Regional Workshop Asia** Last sentence amended as such. **APPPC** agreed by APPPC **Viet Nam** Vietnam agreed with this APPPC comment. **Thailand** Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Japan** Japan support regional comment. *Category : SUBSTANTIVE*
563	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure decay time of ten seconds or more (air pressure decaying from	**Peru** "tightness" should be translated into Spanish as "hermeticidad" and "tight" as "hermético" *Category : TRANSLATION*

#	Para	Text	Comment
		200 Pa to 100 Pa) should be considered suitably gas tight for methyl bromide fumigations.	
564	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure decay time of ten seconds or more (air pressure decaying from 200 Pa to 100 Pa) should be considered suitably gas tight for methyl bromide fumigations.	**Brazil** "tightness" should be translated into Spanish as "hermeticidad" and "tight" as "hermético" *Category : TRANSLATION*
565	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure decay time of ten seconds or more ~~(air pressure decaying from~~ should be considered suitably gas tight~~200 Pa to 100 Pa) should be considered suitably gas tight~~ for methyl bromide fumigations.	**Ozone Secretariat** This has been proven to be uneccessarly high. 6.5 has it covered so why does 5.1.1 need to be there at all? *Category : TECHNICAL*
566	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure decay time of ten seconds or more (air pressure decaying from 200 Pa to 100 Pa) should be considered suitably gas tight	**Ozone Secretariat** Background data of the figures are not cited to examine whether these figures show suitable gas tightness for methyl bromide fumigation. Specific figures should be examples because required gas tightness differs with type of enclosures or other factors. *Category : TECHNICAL*

#	Para	Text	Comment
		for methyl bromide fumigations.	
567	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure decay time of ten seconds or more (air pressure decaying from 200 Pa to 100 Pa) should be considered suitably gas tight for methyl bromide fumigations.	**Argentina** "tightness" should be translated into Spanish as "hermeticidad" and "tight" as "hermético" *Category : TRANSLATION*
568	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure ~~decay~~ decreasing time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure ~~decay~~ decreasing time of ten seconds or ~~more~~ more~~(air pressure decaying from~~ should be considered suitably gas tight~~200 Pa to 100 Pa) should be considered suitably gas tight~~ for methyl bromide fumigations.	**Japan** -Editorial -See Japan's general comment. *Category : SUBSTANTIVE*
569	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure ~~will depend~~ should be based on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or ~~people). For example, an enclosure having a half pressure decay time of ten seconds~~ people) and on any additional regulation regarding emission tolerances.~~or more (air pressure decaying from 200 Pa to 100 Pa) should~~	**European Union** The requirement should be explicit by 'should be based' rather that the weak 'will depend on'. Furthermore, emission regulation should be taken into account. The example do not add anything and it might raise important issue linked to a noxious and controversial chemical. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~be considered suitably gas tight for methyl bromide fumigations.~~	
570	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure ~~will depend~~ should be based on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or ~~people)~~people) and on any national regulation regarding emission tolerances. ~~For example, an enclosure having a half pressure decay time of ten seconds or more (air pressure decaying from 200 Pa to 100 Pa) should be considered suitably gas tight for methyl bromide fumigations.~~	**EPPO** The requirement should be explicit by 'should be based' rather that the weak 'will depend on'. Furthermore, emission regulation should be taken into account. The example do not add anything and it might raise important issue linked to a noxious and controversial chemical. *Category : SUBSTANTIVE*
571	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). ~~For example, an enclosure having a half pressure decay time of ten seconds or more (air pressure decaying from 200 Pa to 100 Pa) should be considered suitably gas tight for methyl bromide fumigations.~~	**United States of America** This blanket of pressure testing of break bulk containers is not correct. Some refrigerated (reefer) containers are not pressure tested when tarped. The 200 pascals to 100 Pascals is incorrect and should be removed. Remove last sentence with the example because it doesn't add value to the standard. *Category : TECHNICAL*
572	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure decay time of ten seconds or more (air pressure decaying from	**Uruguay** "tightness" should be translated into Spanish as "hermeticidad" and "tight" as "hermético" *Category : TRANSLATION*

#	Para	Text	Comment
		200 Pa to 100 Pa) should be considered suitably gas tight for methyl bromide fumigations.	
573	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure ~~decay~~ decreasing time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure ~~decay~~ decreasing time of ten seconds or more (air pressure ~~decaying~~ decreasing from 200 Pa to 100 Pa) ~~should~~ may be considered suitably gas tight for methyl bromide fumigations.	**Korea, Republic of** Propose to move from 5.1.1 to 6.5 Gas tightness test. *Category : EDITORIAL*
574	85	~~Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure decay time of ten seconds or more (air pressure decaying from 200 Pa to 100 Pa) should be considered suitably gas tight for methyl bromide fumigations.~~	**Australia** This paragraph is repeated later on in 6.5 and 6.5 is the most appropriate location for this. *Category : TECHNICAL*
575	85	Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decay time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure decay time of ten seconds or more (air pressure decaying from 200 Pa to 100 Pa) should be considered suitably gas tight	**COSAVE** "tightness" should be translated as "hermeticidad" "tight" should be translated as "hermético" *Category : TRANSLATION*

#	Para	Text	Comment
		for methyl bromide fumigations.	
576	85	En recintos cuya ~~estanqueidad~~ hermeticidad al gas pueda no ser suficiente para garantizar el mantenimiento de concentraciones de gas ~~suficientes~~ requeridos durante ~~toda~~ el período de la fumigación, la ~~estanqueidad~~ hermeticidad debería determinarse midiendo el tiempo de la caída de la presión hasta la mitad. La ~~estanqueidad~~ hermeticidad al gas necesaria en un recinto dependerá del fumigante que se esté utilizando y del ~~entorno~~ ambiente del recinto de fumigación (p. ej., de la cercanía de personas, productos o equipos sensibles). Por ejemplo, un recinto con un tiempo de caída de la presión hasta la mitad de diez segundos o más (caída de la presión del aire de 200 Pa a 100 Pa) debería considerarse suficientemente ~~estanco~~ hermético para las fumigaciones con bromuro de metilo.	**Panama** Términos más apropiados *Category : EDITORIAL*
577	85	En recintos cuya ~~estanqueidad~~ hermeticidad al gas pueda no ser suficiente para garantizar el mantenimiento de concentraciones de gas ~~suficientes~~ requeridos durante ~~toda~~ la fumigación, la ~~estanqueidad~~ hermeticidad debería determinarse midiendo el tiempo de la caída de la presión hasta la mitad. La ~~estanqueidad~~ hermeticidad al gas necesaria en un recinto dependerá del fumigante que se esté utilizando y del ~~entorno~~ ambiente del recinto de fumigación (p. ej., de la cercanía de personas, productos o equipos sensibles). Por ejemplo, un recinto con un tiempo de caída de la presión hasta la mitad de diez segundos o más (caída de la presión del aire de 200 Pa a 100 Pa) debería considerarse suficientemente ~~estanco~~ hermético para las fumigaciones con bromuro de metilo.	**OIRSA** Términos más apropiados. *Category : EDITORIAL*
578	86	**5.2 Fumigation ~~equipment~~calibration**	**Ozone Secretariat** Para 87 is all about calibration. *Category : SUBSTANTIVE*
579	86	**5.2 Equipment calibration~~Fumigation equipment~~**	**New Zealand** this is what the para is about *Category : TECHNICAL*
580	86	**~~5~~6.2 Equipo de fumigación**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*

#	Para	Text	Comment
581	86	~~5~~6.2 **Equipo de fumigación**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
582	87	All equipment used for measuring fumigation parameters (e.g. measuring devices) should be calibrated according to the manufacturer's ~~instructions~~instructions and NPPO specifications.	**Costa Rica** Accept from IPPC Regional Workshop Latin America *Category : TECHNICAL*
583	87	All equipment used for measuring fumigation parameters (e.g. measuring devices) should be calibrated according to the manufacturer's ~~instructions~~instructions and NPPO specifications.	**IPPC Regional Workshop Latin America** The NPPO may also provide specifications for calibrations *Category : TECHNICAL*
584	87	All equipment used for measuring fumigation parameters (e.g. measuring devices) should be calibrated according to the manufacturer's ~~instructions~~instructions and NPPO specifications.	**Peru** The NPPO may also provide specifications for calibrations *Category : TECHNICAL*
585	87	All equipment used for measuring fumigation parameters (e.g. ~~measuring devices)~~ thermometers, gas monitors) should be calibrated according to the manufacturer's instructions.	**Ozone Secretariat** Measuring devices is too general for an example. *Category : EDITORIAL*
586	87	All equipment used for measuring fumigation parameters (e.g. measuring devices) should be calibrated according to the manufacturer's ~~instructions~~instructions and NPPO specifications.	**Argentina** The NPPO may also provide specifications for calibrations *Category : TECHNICAL*
587	87	All equipment used for measuring fumigation parameters (e.g. measuring devices) should be calibrated according to the manufacturer's ~~instructions~~instructions and NPPO specifications.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 23:17 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
588	87	All equipment used for measuring fumigation parameters ~~(e.g. measuring devices)~~ should be calibrated according to the manufacturer's instructions.	**European Union** Not needed. What except 'measuring devices' could be used 'for measuring fumigation parameters'? *Category : EDITORIAL*
589	87	All equipment used for measuring fumigation parameters (e.g. measuring devices) should be calibrated according to the manufacturer's ~~instructions~~instructions and NPPO specification.	**Brazil** The NPPO may also provide specifications for calibrations *Category : TECHNICAL*
590	87	All equipment used for measuring fumigation parameters ~~(e.g. measuring~~ (measuring devices) should be calibrated according to the manufacturer's instructions.	**EPPO** No needed. What except 'measuring devices' could be used 'for measuring fumigation parameters'? *Category : EDITORIAL*

#	Para	Text	Comment
591	87	All equipment used for measuring fumigation parameters (e.g. measuring devices) should be calibrated according to the manufacturer's instructions.	**United States of America** Calibrated by who? Is it a calibration company or the operator of the enclosure. USDA requires once a year calibration and a certificate of calibration. This should be specified. *Category : TECHNICAL*
592	87	All equipment used for measuring fumigation parameters (e.g. measuring devices) should be calibrated according to the manufacturer's ~~instructions~~instructions and NPPO specification.	**Uruguay** The NPPO may also provide specifications for calibrations *Category : TECHNICAL*
593	87	All equipment used for measuring fumigation ~~parameters (e.g. measuring devices)~~ parameters should be calibrated according to the manufacturer's instructions.	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*
594	87	All equipment used for measuring fumigation parameters ~~(e.g. measuring~~ (measuring devices) should be calibrated according to the manufacturer's instructions.	**Azerbaijan** *Category : EDITORIAL*
595	87	All equipment used for measuring fumigation parameters (e.g. measuring devices) should be calibrated according to the manufacturer's ~~instructions~~instructions and NPPO specification.	**COSAVE** The NPPO may also provide specifications for calibrations *Category : TECHNICAL*
596	87	Todo ~~el~~ equipo utilizado para medir los parámetros de fumigación (p. ej., los dispositivos de medición) debería calibrarse conforme a las instrucciones del fabricante.	**Panama** Mejor redacción *Category : EDITORIAL*
597	87	Todo el equipo utilizado para medir los parámetros de fumigación (p. ej., los dispositivos de medición) debería ~~calibrarse conforme a las instrucciones del fabricante~~ser calibrado con patrones certificados por organismos de metrología especializados.	**Colombia** Refuerza y legitima los resultados del proceso de calibración. *Category : SUBSTANTIVE*
598	87	Todo ~~el~~ equipo utilizado para medir los parámetros de fumigación (p. ej., los dispositivos de medición) debería calibrarse conforme a las instrucciones del fabricante.	**OIRSA** Mejor redacción *Category : EDITORIAL*
599	88	**5.2.1 Dosing ~~devices~~equipment**	**IPPC Regional Workshop Asia** To be consistent with text below. **APPPC** agreed by APPPC **China** China agreed to this regional comments. **Thailand** Thailand agree with APPPC comment. **Korea, Republic of** Republic of Korea agree with APPPC comment. **Viet Nam** Vietnam agreed with this APPPC comment.

#	Para	Text	Comment
			Category : EDITORIAL
600	88	**5.2.1 Dosing ~~devices~~devices and materials**	**Canada** *Category : TECHNICAL*
601	88	**5.2.1 Dosing ~~devices~~equipment**	**Peru** For consistency *Category : EDITORIAL*
602	88	**5.2.1 Dosing ~~devices~~equipment**	**Argentina** For consistency *Category : EDITORIAL*
603	88	**5.2.1 Dosing ~~devices~~equipment**	**Brazil** For consistency *Category : EDITORIAL*
604	88	**5.2.1 Dosing ~~devices~~equipment**	**Uruguay** For consistency *Category : EDITORIAL*
605	88	**5.2.1 Dosing ~~devices~~equipment**	**China** Corresponds to the "Dosing equipment" in next paragraph. *Category : EDITORIAL*
606	88	**5.2.1 Dosing ~~devices~~equipment**	**COSAVE** For consistency *Category : EDITORIAL*
607	88	**~~6~~5.2.1 Dosificadores**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
608	88	**~~5~~6.2.1 Dosificadores**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
609	89	Dosing equipment should enable the quantitative introduction of fumigant gas into an enclosure. Dosing equipment includes an appropriately safe and secure storage vessel for the fumigant, and lines that allow the fumigant to be delivered to the enclosure, and should include a device that can either measure the rate or volume of gas flow into an enclosure (e.g. a gas mass flow-meter) or measure the volume or weight loss from the gas ~~storage~~ containers supplying the enclosure (e.g. a scale or balance). In some cases, gas cylinders may be opened within the enclosure applying a known volume or weight of gas into the enclosure to achieve the required fumigant ~~dose~~dose or deposit required amount of aluminium or magnesium phosphide tablets calculated to release required amount of	**Canada** *Category : TECHNICAL*

#	Para	Text	Comment
		phoshine gas for the particular scenario ..	
610	89	Dosing equipment should enable the quantitative introduction of fumigant gas into an enclosure. Dosing equipment includes an appropriately safe and secure storage vessel for the fumigant, and lines that allow the fumigant to be delivered to the enclosure, and should include a device that can either measure the rate or volume of gas flow into an enclosure (e.g. a gas mass flow-meter) or measure the volume or weight loss from the gas storage supplying the enclosure (e.g. a scale or balance). ~~In some cases, gas cylinders may be opened within the enclosure applying a known volume or weight of gas into the enclosure to achieve the required fumigant dose.~~	**Ozone Secretariat** This is an unsafe practice and IPPC should not be encouraging it. Can also lead to overdosing with MB which is contra to recommendations.Also MB should be applied through a heat exchanger to volatise the gas for best results. *Category : SUBSTANTIVE*
611	89	Dosing equipment should enable the quantitative introduction of fumigant gas into an enclosure. Dosing equipment includes an appropriately safe and secure storage vessel for the fumigant, and lines that allow the fumigant to be delivered to the enclosure, and should include a device that can either measure the rate or volume of gas flow into an enclosure (e.g. a gas mass flow-meter) or measure the volume or weight loss from the gas storage supplying the enclosure (e.g. a scale or balance). In some cases, gas cylinders may be opened within the enclosure applying a known volume or weight of gas into the enclosure to achieve the required fumigant dose. Material of the devices should be decided based on chemical properties of fumigant used.	**Ozone Secretariat** For example, a corrosive fumigant requires a stainless steel as a material of the device. *Category : SUBSTANTIVE*
612	89	Dosing equipment should enable the quantitative introduction of fumigant gas into an enclosure. Dosing equipment includes an appropriately safe and secure storage vessel for the fumigant, and lines that allow the fumigant to be delivered to the enclosure, and should include a device that can either measure the rate or volume of gas flow into an enclosure (e.g. a gas mass flow-meter) or measure the volume or weight loss from the gas storage supplying the enclosure (e.g. a scale or balance). In some cases, gas cylinders may be opened within the enclosure applying a known volume or weight of gas into the enclosure to	**European Union** Hard fumigants should not be excluded and guideline is needed for them. *Category : TECHNICAL*

#	Para	Text	Comment
		achieve the required fumigant dose. For hard substance fumigants specific plant protection product requirements should be taken into account.	
613	89	Dosing equipment should enable the quantitative introduction of fumigant gas into an enclosure. Dosing equipment includes an appropriately safe and secure storage vessel for the fumigant, and lines that allow the fumigant to be delivered to the enclosure, and should include a device that can either measure the rate or volume of gas flow into an enclosure (e.g. a gas mass flow-meter) or measure the volume or weight loss from the gas storage supplying the enclosure (e.g. a scale or balance). In some cases, gas cylinders may be opened within the enclosure applying a known volume or weight of gas into the enclosure to achieve the required fumigant dose. For hard substance fumigants specific plant protection product requirements should be taken into account.	**EPPO** Hard fumigants should not be excluded and also guidelines needed for them. *Category : TECHNICAL*
614	89	Dosing equipment should enable the quantitative introduction of fumigant gas into an enclosure. Dosing equipment includes an appropriately safe and secure storage vessel for the fumigant, and lines that allow the fumigant to be delivered to the enclosure, and should include a device that can either measure the rate or volume of gas flow into an enclosure (e.g. a gas mass flow-meter) or measure the volume or weight loss from the gas storage supplying the enclosure (e.g. a scale or balance). ~~In some cases, gas cylinders may be opened within the enclosure applying a known volume or weight of gas into the enclosure to achieve the required fumigant dose~~.	**New Zealand** Remove last sentence - this an unsafe practice ...and can also lead to overdosing with MB. *Category : TECHNICAL*
615	89	Dosing equipment should enable the quantitative introduction of fumigant gas into an enclosure. Dosing equipment includes an appropriately safe and secure storage vessel for the fumigant, and lines that allow the fumigant to be delivered to the enclosure, and should include a device that can either measure the rate or volume of gas flow into an enclosure (e.g. a gas mass flow-meter) or measure the	**Australia** This is an unsafe practice and IPPC should not be encouraging it. Can also lead to overdosing with MB which is contra to recommendations *Category : EDITORIAL*

#	Para	Text	Comment
		volume or weight loss from the gas storage supplying the enclosure (e.g. a scale or balance). ~~In some cases, gas cylinders may be opened within the enclosure applying a known volume or weight of gas into the enclosure to achieve the required fumigant dose.~~	
616	89	Dosing equipment should enable the quantitative introduction of fumigant gas into an enclosure. Dosing equipment includes an appropriately safe and secure storage vessel for the fumigant, and lines that allow the fumigant to be delivered to the enclosure, and should include a device that can either measure the rate or volume of gas flow into an ~~enclosure (e.g. a gas mass flow meter)~~ enclosure or measure the volume or weight loss from the gas storage supplying the ~~enclosure (e.g~~enclosure. ~~a scale or balance).~~ In some cases, gas cylinders may be opened within the enclosure applying a known volume or weight of gas into the enclosure to achieve the required fumigant dose.	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*
617	89	El equipo de dosificación debería permitir la introducción en el recinto de cantidades del gas fumigante. El equipo de dosificación consta de un recipiente de almacenamiento ~~suficientemente~~ seguro y protegido para el fumigante y de conductos para su suministro al recinto, y debería incluir un dispositivo que pueda medir el caudal o flujo del gas hacia el recinto (p. ej., un ~~caudalímetro~~ dosificador de gas) o medir la disminución de volumen o de peso del recipiente de gas que abastece al recinto (p. ej., una báscula o balanza). En algunos casos, podrán abrirse ~~bombonas~~ cilindros de gas dentro del recinto liberándose un volumen o peso conocido de gas para alcanzar la dosis de fumigante necesaria.	**Panama** Términos más apropiados y mejor traducción al español. *Category : EDITORIAL*
618	89	El equipo de dosificación debería permitir la introducción en el recinto de cantidades del gas fumigante. El equipo de dosificación consta de un recipiente de almacenamiento ~~suficientemente~~ seguro y protegido para el fumigante y de conductos para su suministro al recinto, y debería incluir un dispositivo que pueda medir el caudal o flujo del gas hacia el recinto (p. ej., un ~~caudalímetro~~ dosificador de gas) o medir la disminución de volumen o de peso del recipiente	**OIRSA** Términos más apropiados y mejor traducción al español. *Category : EDITORIAL*

#	Para	Text	Comment
		de gas que abastece al recinto (p. ej., una báscula o balanza). En algunos casos, podrán abrirse ~~bombonas~~ cilindros de gas dentro del recinto liberándose un volumen o peso conocido de gas para alcanzar la dosis de fumigante necesaria.	
619	90	~~5~~6.2.2 **Vaporizador de gas**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
620	90	~~5~~6.2.2 **Vaporizador de gas**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
621	91	Some fumigants are stored as a compressed liquid in a metal cylinder. Release and vaporization of a significant quantity of the liquid as required for fumigation will absorb a significant amount of energy. A vaporizer should be used to provide energy (as heat) during the vaporization of the liquid to a gas to ensure that the required amount of gas is provided to the enclosure.	**Costa Rica** cilynder" should be translated as "cilindro" *Category : TRANSLATION*
622	91	Some fumigants are stored as a compressed liquid in a metal cylinder. Release and vaporization of a significant quantity of the liquid as required for fumigation will absorb a significant amount of energy. A vaporizer ~~should~~ may be used to provide energy (as heat) during the vaporization of the liquid to a gas to ensure that the required amount of gas is provided to the enclosure.	**IPPC Regional Workshop Asia** To change "should" to "may" to allow for situations in countries that do not require this. **APPPC** agreed by APPPC **China** China agreed to this regional comments. **Thailand** Thailand agree with APPPC comment. **Korea, Republic of** Republic of Korea agree with APPPC comment. **Japan** Japan support regional comment. **Viet Nam** Vietnam agreed with this APPPC comment. *Category : TECHNICAL*
623	91	Some fumigants are stored as a compressed liquid in a metal cylinder. Release and vaporization of a significant quantity of the liquid as required for fumigation will absorb a significant amount of energy. A vaporizer should be used to provide energy (as heat) during the vaporization of the liquid to a gas to ensure that the required amount of gas is provided to the enclosure.	**Peru** "cylinder" should be translated into Spanish as "cilindro" *Category : TRANSLATION*

#	Para	Text	Comment
624	91	Some fumigants are stored as a compressed liquid in a metal cylinder. Release and vaporization of a significant quantity of the liquid as required for fumigation will absorb a significant amount of energy. A vaporizer should be used to provide energy (as heat) during the vaporization of the liquid to a gas to ensure that the required amount of gas is provided to the enclosure. capacity of pressure-resistant or vaporization is required for gas vaporizer depending on fumigants.	**Ozone Secretariat** *Category : SUBSTANTIVE*
625	91	Some fumigants are stored as a compressed liquid in a metal cylinder. Release and vaporization of a significant quantity of the liquid as required for fumigation will absorb a significant amount of energy. A vaporizer should be used to provide energy (as heat) during the vaporization of the liquid to a gas to ensure that the required amount of gas is provided to the enclosure.	**Argentina** "cylinder" should be translated into Spanish as "cilindro" *Category : TRANSLATION*
626	91	Some fumigants are stored as a compressed liquid in a metal cylinder. Release and vaporization of a significant quantity of the liquid as required for fumigation will absorb a significant amount of energy. A vaporizer should be used to provide energy (as heat) during the vaporization of the liquid to a gas to ensure that the required amount of gas is provided to the enclosure. Appropriate gas vaporizer should be used depending on fumigants taking into account of capacity of pressure-resistant or vaporizetion.	**Japan** Add information on gas vaporizer in order to ensure to fulfill the requirements of gas vaporizer. *Category : TECHNICAL*
627	91	Some fumigants are stored as a compressed liquid in a metal cylinder. Release and vaporization of a significant quantity of the liquid as required for fumigation will absorb a significant amount of energy. A vaporizer should be used to provide energy (as heat) during the vaporization of the liquid to a gas to ensure that the required amount of gas is provided to the enclosure.	**United States of America** Second sentence: vaporizer is also known as a volatilizer in other countries. *Category : TECHNICAL*
628	91	Some fumigants are stored as a compressed liquid in a metal cylinder. Release and vaporization of a significant quantity of the liquid as required for fumigation will absorb a significant amount of energy. A vaporizer should be used to provide energy (as heat) during the vaporization of the	**Uruguay** "cylinder" should be translated into Spanish as "cilindro" *Category : TRANSLATION*

#	Para	Text	Comment
		liquid to a gas to ensure that the required amount of gas is provided to the enclosure.	
629	91	Some fumigants are stored as a compressed liquid in a metal cylinder. Release and vaporization of a significant quantity of the liquid as required for fumigation will absorb a significant amount of energy. A vaporizer should be used to provide energy (as heat) during the vaporization of the liquid to a gas to ensure that the required amount of gas is provided to the enclosure.	**IPPC Regional Workshop Latin America** "cilynder" should be translated as "cilindro" *Category : TRANSLATION*
630	91	Some fumigants are stored as a compressed liquid in a metal cylinder. Release and vaporization of a significant quantity of the liquid as required for fumigation will absorb a significant amount of energy. A vaporizer ~~should~~ may be used to provide energy (as heat) during the vaporization of the liquid to a gas to ensure that the required amount of gas is provided to the enclosure.	**Korea, Republic of** Using a vaporizer should not be mandatory in high temperature. *Category : TECHNICAL*
631	91	Algunos fumigantes se almacenan comprimidos en estado líquido en ~~una bombona metálica~~un cilindro metálico. La liberación y evaporación de una cantidad considerable del líquido necesario para la fumigación absorberá una considerable cantidad de energía. Durante la evaporación del líquido a gas debería emplearse un vaporizador que aporte energía (en forma de calor) para garantizar que se introduce en el recinto la cantidad de gas necesaria.	**Colombia** Precisión en el texto *Category : TECHNICAL*
632	91	Algunos fumigantes se almacenan comprimidos en estado líquido en ~~una bombona metálica~~un cilindro metálico. La liberación y evaporación de una cantidad considerable del líquido necesario para la fumigación absorberá una considerable cantidad de energía. Durante la evaporación del líquido a gas debería emplearse un vaporizador que aporte energía (en forma de calor) para garantizar que se introduce en el recinto ~~la cantidad~~ en estado de ~~gas necesaria~~gas.	**Panama** Mejor redacción *Category : EDITORIAL*
633	91	Algunos fumigantes se almacenan comprimidos en estado líquido en ~~una bombona metálica~~un cilindro metálico. La liberación y evaporación de una cantidad considerable del líquido necesario para la fumigación absorberá una	**OIRSA** Mejor redacción *Category : EDITORIAL*

#	Para	Text	Comment
		considerable cantidad de energía. Durante la evaporación del líquido a gas debería emplearse un vaporizador que aporte energía (en forma de calor) para garantizar que se introduce en ~~el recinto la cantidad~~ estado de ~~gas necesaria~~gas.	
634	92	~~5~~6.2.3 Equipo de calentamiento	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
635	92	~~5~~6.2.3 Equipo de calentamiento	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
636	93	When it is necessary to raise the temperature of the commodity and the air within the enclosure, exposed heating sources should not be used with flammable fumigants or fumigants that decompose at high temperatures (see Appendix 2 for fumigant chemical properties).	**IPPC Regional Workshop Asia** to retain **APPPC** agreed by APPPC **Bangladesh** Bangladesh agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : EDITORIAL*
637	93	When it is necessary to raise the temperature of the commodity and the air within the enclosure, exposed heating sources should not be used with flammable fumigants or fumigants that decompose at high temperatures or fumigants that could corrode parts in the heating equipment and affect their performance (e.g phosphine) (see Appendix 2 for fumigant chemical properties).	**Canada** *Category : TECHNICAL*
638	93	When it is necessary to raise the temperature of the commodity and the air within the enclosure, exposed heating sources should not be used with flammable fumigants or fumigants that decompose at high temperatures (see Appendix 2 for fumigant chemical properties).	**Peru** Consequential change according the proposal to delete Appendix 1 *Category : TECHNICAL*
639	93	When it is necessary to raise the temperature of the commodity and the air within the enclosure, exposed heating sources should not be used with flammable fumigants or fumigants that decompose at high	**Argentina** Consequential change according the proposal to delete Appendix 1 *Category : TECHNICAL*

#	Para	Text	Comment
		temperatures (see Appendix ~~2~~ 1 for fumigant chemical properties).	
640	93	When it is necessary to raise the temperature of the commodity and the air within the enclosure, exposed heating sources should not be used with flammable fumigants or fumigants that decompose at high temperatures (see Appendix ~~2~~ 1 for fumigant chemical properties).	**Brazil** Consequential change according the proposal to delete Appendix 1 *Category : TECHNICAL*
641	93	When it is necessary to raise the temperature of the commodity and the air within the enclosure, exposed heating sources should not be used with flammable fumigants or fumigants that decompose at high ~~temperatures~~ temperatures~~(see Appendix 2 for fumigant chemical properties)~~.	**United States of America** Suggest removing Appendix 2. *Category : TECHNICAL*
642	93	When it is necessary to raise the temperature of the commodity and the air within the enclosure, exposed heating sources should not be used with flammable fumigants or fumigants that decompose at high temperatures (see Appendix ~~2~~ 1 for fumigant chemical properties).	**Uruguay** Consequential change according the proposal to delete Appendix 1 *Category : TECHNICAL*
643	93	When it is necessary to raise the temperature of the commodity and the air within the enclosure, exposed heating sources should not be used with flammable fumigants or fumigants that decompose at high temperatures (see Appendix ~~2~~ 1 for fumigant chemical properties).	**COSAVE** Consequencial change according the proposal to delete Appendix 1 *Category : EDITORIAL*
644	94	**~~5~~6.2.4 Equipo para la circulación del gas**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
645	94	**~~5~~6.2.4 Equipo para la circulación del gas**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
646	95	Even and quick distribution of fumigant gas introduced into the enclosure may be important for successful fumigation of a large quantity of commodity, especially with gases that diffuse relatively slowly. Rapid circulation of gas is required for the fumigation of perishable commodities or	**IPPC Regional Workshop Asia** For countries to check on the last sentence i.e 3 to 10 times or otherwise to comment accordingly. **APPPC** agreed by APPPC **Nepal** Support and agree with Regional Comment

#	Para	Text	Comment
		commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of moving a volume of three to ten times that of the enclosure per hour should be used to ensure gas circulation.	**Viet Nam** Vietnam agreed with this APPPC comment. *Category : EDITORIAL*
647	95	Even and quick distribution of fumigant gas introduced into the enclosure may be important for successful fumigation of a large quantity of commodity, especially with gases that diffuse relatively slowly. Some gases and situations may not need fans e.g., phosphine pellets mixed into grain. Rapid circulation of gas is required for the fumigation of perishable commodities or commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of moving a volume of three to ten times that of the enclosure per hour should be used to ensure gas circulation.	**Ozone Secretariat** The fumigant is mixed with the commodity rather than externally applied. *Category : TECHNICAL*
648	95	Even and quick distribution of fumigant gas introduced into the enclosure may be important for successful fumigation of a large quantity of commodity, especially with gases that diffuse relatively slowly. Rapid circulation of gas is required for the fumigation of perishable commodities or commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of moving a volume of three to ten times that of the enclosure per hour should be used to ensure gas circulation. Required capacity of circulation is different depending on methods or purposes of fumigation.	**Ozone Secretariat** Background data of the figures are not cited to examine whether these figures show suitable gas circulation. Specific figures should be an example because required gas circulation differs with methods or purposes of fumigation. *Category : SUBSTANTIVE*
649	95	Even and quick distribution of fumigant gas introduced into the enclosure may be important for successful fumigation of a large quantity of commodity, especially with gases that diffuse relatively slowly. Rapid circulation of gas is required for the fumigation of perishable commodities or commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of moving a volume of three to ~~ten~~ twenty times that of the enclosure per hour should be used to ensure gas circulation.	**EPPO** We propose to increase this value to 20 as this requirement conforms to recommendations in some of the EPPO countries (e.g. in the Russian Federation). **Russian Federation** I agree *Category : SUBSTANTIVE*
650	95	Even and quick distribution of fumigant gas introduced into the enclosure may be important for successful fumigation of	**Japan** Add information on gas circulation equipment in order to ensure the diffusion in the whole enclosure.

#	Para	Text	Comment
		a large quantity of commodity, especially with gases that diffuse relatively slowly. Rapid circulation of gas is required for the fumigation of perishable commodities or commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of moving a volume of three to ten times that of the enclosure per hour should be used to ensure gas circulation. Appropriate gas circulation equipment should be used to ensure gas diffusion in the fumigation enclosure taking into account of the size of fumigation enclosure, period of fumigation and the arrangement of the commodities in the enclosure.	*Category : TECHNICAL*
651	95	Even and quick distribution of fumigant gas introduced into the enclosure may be important for successful fumigation of a large quantity of commodity, especially with gases that diffuse relatively slowly. Rapid circulation of gas is required for the fumigation of perishable commodities or commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of moving a volume of three to ~~ten~~ twenty times that of the enclosure per hour should be used to ensure gas circulation.	**European Union** We propose to increase this value to 20 as this requirement conforms to recommendations in some of the EU countries. *Category : SUBSTANTIVE*
652	95	Even and quick distribution of fumigant gas introduced into the enclosure may be important for successful fumigation of a large quantity of commodity, especially with gases that diffuse relatively slowly. Rapid circulation of gas is required for the fumigation of perishable commodities or commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of moving a volume of three to ten times that of the enclosure per hour should be used to ensure gas circulation.	**United States of America** Last sentence: The United States uses two or more. "Three to ten times" - this is too specific. *Category : TECHNICAL*
653	95	Even and quick distribution of fumigant gas introduced into the enclosure may be important for successful fumigation of a large quantity of commodity, especially with gases that diffuse relatively slowly. Rapid circulation of gas is required for the fumigation of perishable commodities or commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of moving a volume of three to ten times that of the enclosure	**New Zealand** ie the fumigant is mixed with the commodity rather than being externally applied. *Category : TECHNICAL*

#	Para	Text	Comment
		per hour should be used to ensure gas circulation~~.~~. Some gases and situations may not need fans eg phosphine pellets mixed in to grain	
654	95	Even and quick distribution of fumigant gas introduced into the enclosure ~~may be~~ is important for successful fumigation of a large quantity of commodity, especially with gases that diffuse relatively slowly. Rapid circulation of gas is required for the fumigation of perishable commodities or commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of moving a volume of more than three ~~to ten~~ times that of the enclosure per hour should be used to ensure gas circulation.	**Korea, Republic of** *Category : EDITORIAL*
655	95	Even and quick distribution of fumigant gas introduced into the enclosure may be important for successful fumigation of a large quantity of commodity, especially with gases that diffuse relatively slowly. Rapid circulation of gas is required for the fumigation of perishable commodities or commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of ~~moving a volume of three to ten times that of the enclosure per hour~~ providing adequate gas circulation should be ~~used to ensure gas circulation~~used.	**Japan** The figures are absolutely examples. The figures do not necessarily cover all cases. **Australia** Agreed *Category : EDITORIAL*
656	95	Even and quick distribution of fumigant gas introduced into the enclosure ~~may be~~ is important for successful fumigation of a large quantity of commodity, especially with gases that diffuse relatively slowly. Rapid circulation of gas is required for the fumigation of perishable commodities or commodities that sustain damage on extended exposure to the fumigant. One or more electrical fans capable of moving a volume of three to ten times that of the enclosure per hour should be used to ensure gas circulation.	**Vanuatu** *Category : TECHNICAL*
657	95	Para la fumigación eficaz de una gran cantidad de producto, especialmente con gases de difusión relativamente lenta, ~~podrá ser~~ es importante la distribución uniforme y rápida del gas fumigante introducido en el recinto. Para la fumigación de productos perecederos o de productos que sufren daños con una exposición prolongada al fumigante	**Panama** mejor redacción del párrafo *Category : EDITORIAL*

#	Para	Text	Comment
		se requiere una circulación del gas rápida. Para garantizar la circulación del gas deberían utilizarse uno o más ventiladores eléctricos capaces de mover un volumen por hora de tres a diez veces el del recinto.	
658	95	Para la fumigación eficaz de una gran cantidad de producto, especialmente con gases de difusión relativamente lenta, ~~podrá ser~~ es importante la distribución uniforme y rápida del gas fumigante introducido en el recinto. Para la fumigación de productos perecederos o de productos que sufren daños con una exposición prolongada al fumigante se requiere una circulación del gas rápida. Para garantizar la circulación del gas deberían utilizarse uno o más ventiladores eléctricos capaces de mover un volumen por hora de tres a diez veces el del recinto.	**OIRSA** Mejor redacción *Category : EDITORIAL*
659	96	**~~5~~6.2.5 Instrumentos para medir el contenido de humedad**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
660	96	**~~5~~6.2.5 Instrumentos para medir el contenido de humedad**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
661	97	A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood). Moisture content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the dry weight is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters). Also, it is necessary to have instruments that measure the enviromental humidity at the moment of the fumigation, in those treatments that is required.	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : TECHNICAL*
662	97	A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood). Moisture	**IPPC Regional Workshop Latin America** The enviromental humidity could be important in some cases. *Category : TECHNICAL*

#	Para	Text	Comment
		content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the dry weight is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters). Also, it is necessary to have instruments that measure the enviromental humidity at the moment of the fumigation, in those treatments that is required.	
663	97	A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood). Moisture content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the dry weight is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters).	**Peru** "Moisture meter" should be translated into Spanish as "medidor de humedad" *Category : TRANSLATION*
664	97	A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood). Moisture content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the dry weight is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters).	**Argentina** "Moisture meter" should be translated into Spanish as "medidor de humedad" *Category : TRANSLATION*
665	97	A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood). Moisture content can be measured as a dry or wet weight, where the	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 23:40

#	Para	Text	Comment
		wet weight is the weight of the original "wet" sample and the dry weight is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters). Also, it is necessary to have instruments that measure the enviromental humidity at the moment of the fumigation, in those treatments that is required.	Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
666	97	A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood). ~~Moisture content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the dry weight~~ As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters). ~~is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters).~~	**European Union** The sentence is not needed. *Category : TECHNICAL*
667	97	A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood). Moisture content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the dry weight is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that	**Brazil** "Moisture meter" should be translated into Spanish as "medidor de humedad" *Category : TRANSLATION*

#	Para	Text	Comment
		measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters).	
668	97	A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood)~~. Moisture content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the .dry weight~~ As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters).~~ is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters).~~	**EPPO** The sentence is not needed *Category : TECHNICAL*
669	97	A moisture meter gives a reading of the approximate moisture content of ~~the commodity (e.g~~those commodities where applicable. ~~wood).~~ Moisture content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the dry weight is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot~~, moisture meters need only measure within 5% of the actual moisture content~~. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters).	**United States of America** First sentence: more correct statement Third sentence: The accuracy depends on moisture meter. Remove the 5%, The accuracy should be the most accurate moisture meter that one can buy. *Category : TECHNICAL*
670	97	A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood). Moisture content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the dry weight is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture	**Uruguay** "Moisture meter" should be translated into Spanish as "medidor de humedad" *Category : TRANSLATION*

#	Para	Text	Comment
		meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters).	
671	97	~~A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood).~~ Moisture content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the dry weight is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters).	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*
672	97	A moisture meter gives a reading of the approximate moisture content of the commodity (e.g. wood). Moisture content can be measured as a dry or wet weight, where the wet weight is the weight of the original "wet" sample and the dry weight is the weight of the sample after drying in an oven. As moisture content will usually vary within and between the commodities within the same lot, moisture meters need only measure within 5% of the actual moisture content. Available moisture meters include those that measure electrical resistance (pin meters) or use electrometric wave technology (pinless meters).	**COSAVE** "moisture meter" translate as "medidor de humedad" *Category : TRANSLATION*
673	97	Un humidímetro indica el contenido de humedad aproximado del producto (p. ej., de la madera). El contenido de humedad se puede medir como peso en seco o como peso en húmedo, donde el peso en húmedo es el peso de la muestra "húmeda" original y el peso en seco es el peso de la muestra después de secarla en una estufa. Dado que el contenido de humedad variará, por lo general, dentro de un producto y entre los productos del mismo lote, los humidímetros solo necesitan medir con un margen de error del 5 % respecto del contenido de humedad real. Hay humidímetros que miden la resistencia eléctrica (con sonda) y humidímetros que usan ondas electromagnéticas (sin	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 6 sep. 2017 23:36 Accepted from Latin American IPPC regional workshop *Category : TECHNICAL*

#	Para	Text	Comment
		sonda). De igual manera es necesario tener instrumentos para medir la humedad del ambiente en el momento de la aplicación de la fumigación, en aquellos tratamientos que sea requerido.	
674	97	Un humidímetro indica el contenido de humedad aproximado del producto (p. ej., de la madera). El contenido de humedad se puede medir como peso en seco o como peso en húmedo, donde el peso en húmedo es el peso de la muestra "húmeda" original y el peso en seco es el peso de la muestra después de secarla en una estufa. Dado que el contenido de humedad variará, por lo general, dentro de un producto y entre los productos del mismo lote, los humidímetros solo necesitan medir con un margen de error del 5 % respecto del contenido de humedad real. Hay humidímetros que miden la resistencia eléctrica (con sonda) y humidímetros que usan ondas electromagnéticas (sin sonda). De igual manera es necesario tener instrumentos para medir la humedad del ambiente en el momento de la aplicación de la fumigación, en aquellos tratamientos que sea requerido.	**IPPC Regional Workshop Latin America** La humedad del ambiente podría ser importante en algunas fumigaciones. *Category : TECHNICAL*
675	97	Un humidímetro indica el contenido de humedad aproximado del ~~producto (p. ej., de la madera)~~producto. ~~El contenido de humedad se puede medir como peso en seco o como peso en húmedo, donde el peso en húmedo es el peso de la muestra "húmeda" original y el peso en seco es el peso de la muestra después de secarla en una estufa.~~ Dado que el contenido de humedad variará, por lo general, dentro de un producto y entre los productos del mismo lote, los humidímetros solo necesitan medir con un margen de error del 5 % respecto del contenido de humedad real. Hay humidímetros que miden la resistencia eléctrica (con sonda) y humidímetros que usan ondas electromagnéticas (sin sonda).	**Panama** Es un instrumento no del procedimiento, de ejemplo la "madera" no es el mas indicado. *Category : TECHNICAL*
676	97	Un humidímetro indica el contenido de humedad aproximado del producto (p. ej., de la madera). El contenido de humedad se puede medir como peso en seco o como	**Colombia** La humedad del ambiente es importante debido a que esta aportar o quitar humedad al producto y por ende afectar el efecto del fumigante.

#	Para	Text	Comment
		peso en húmedo, donde el peso en húmedo es el peso de la muestra "húmeda" original y el peso en seco es el peso de la muestra después de secarla en una estufa. De igual manera es necesario tener un instrumento para medir la humedad del ambiente en el momento de la aplicación del tratamiento. Dado que el contenido de humedad variará, por lo general, dentro de un producto y entre los productos del mismo lote, los humidímetros solo necesitan medir con un margen de error del 5 % respecto del contenido de humedad real. Hay humidímetros que miden la resistencia eléctrica (con sonda) y humidímetros que usan ondas electromagnéticas (sin sonda).	*Category : SUBSTANTIVE*
677	97	Un humidímetro indica el contenido de humedad aproximado del ~~producto (p. ej., de la madera)~~producto. ~~El contenido de humedad se puede medir como peso en seco o como peso en húmedo, donde el peso en húmedo es el peso de la muestra "húmeda" original y el peso en seco es el peso de la muestra después de secarla en una estufa.~~ Dado que el contenido de humedad variará, por lo general, dentro de un producto y entre los productos del mismo lote, los humidímetros solo necesitan medir con un margen de error del 5 % respecto del contenido de humedad real. Hay humidímetros que miden la resistencia eléctrica (con sonda) y humidímetros que usan ondas electromagnéticas (sin sonda).	**OIRSA** Es un instrumento no del procedimiento, de ejemplo la "madera" no es el mas indicado. *Category : TECHNICAL*
678	98	**~~6~~5.2.6 Instrumentos para medir el vacío**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
679	98	**~~5~~6.2.6 Instrumentos para medir el vacío**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
680	99	A suitable vacuum gauge, of appropriate accuracy and sensitivity, should be used to measure and record the air pressure or vacuum drawn and maintained during the exposure or testing period. Suitable vacuum gauges may include a simple U-tube manometer or a Bourdon gauge, although specialized electronic measuring ~~devices~~	**Peru** For consistency *Category : EDITORIAL*

#	Para	Text	Comment
		instruments are also available, and should measure within 10 Pa of the actual pressure.	
681	99	A suitable vacuum gauge, of appropriate accuracy and sensitivity, should be used to measure and record the air pressure or vacuum drawn and maintained during the exposure or testing period. Suitable vacuum gauges may include a simple U-tube manometer or a Bourdon gauge, although specialized electronic measuring ~~devices~~ instruments are also available, and should measure within 10 Pa of the actual pressure.	**Argentina** For consistency *Category : EDITORIAL*
682	99	A suitable vacuum gauge, of appropriate accuracy and sensitivity, should be used to measure and record the air pressure or vacuum drawn and maintained during the exposure or testing period. Suitable vacuum gauges may include a simple U-tube manometer or a Bourdon gauge, although specialized electronic measuring devices are also available~~,~~. Consult the manufacturer's specification for the equipment and choose the one that should be able to measure ~~within 10 Pa of~~ the actual pressure.	**United States of America** Suggest removing the 10Pa. However, this depends on the accuracy of the measuring device. *Category : TECHNICAL*
683	99	A suitable vacuum gauge, of appropriate accuracy and sensitivity, should be used to measure and record the air pressure or vacuum drawn and maintained during the exposure or testing period. Suitable vacuum gauges may include a simple U-tube manometer or a Bourdon gauge, although specialized electronic measuring ~~devices~~ instruments are also available, and should measure within 10 Pa of the actual pressure.	**Uruguay** For consistency *Category : EDITORIAL*
684	99	A suitable vacuum gauge, of appropriate accuracy and sensitivity, should be used to measure and record the air pressure or vacuum drawn and maintained during the exposure or testing period. Suitable vacuum gauges may include a simple U-tube manometer or a Bourdon gauge, although specialized electronic measuring devices are also available, and should measure within 10 Pa of the actual pressure.	**Philippines** Include procedure on how to measure vacuum *Category : SUBSTANTIVE*
685	99	A suitable vacuum gauge, of appropriate accuracy and sensitivity, should be used to measure and record the air	**COSAVE** for consistency *Category : EDITORIAL*

#	Para	Text	Comment
		pressure or vacuum drawn and maintained during the exposure or testing period. Suitable vacuum gauges may include a simple U-tube manometer or a Bourdon gauge, although specialized electronic measuring ~~devices~~ instruments are also available, and should measure within 10 Pa of the actual pressure.	
686	99	Para medir y registrar la presión de aire o el vacío ~~realizado~~ producido y mantenido durante el período de exposición o de prueba debería emplearse un vacuómetro adecuado, con la exactitud y sensibilidad pertinentes. Los vacuómetros idóneos podrán contar con un sencillo manómetro de tubo en U o un manómetro de Bourdon, aunque también hay dispositivos de medición electrónicos especializados, y deberían medir la presión con un error máximo de 10 Pa respecto del valor real.	**Panama** Mejor redacción del texto *Category : EDITORIAL*
687	99	Para medir y registrar la presión de aire o el vacío ~~realizado~~ producido y mantenido durante el período de exposición o de prueba debería emplearse un vacuómetro adecuado, con la exactitud y sensibilidad pertinentes. Los vacuómetros idóneos podrán contar con un sencillo manómetro de tubo en U o un manómetro de Bourdon, aunque también hay dispositivos de medición electrónicos especializados, y deberían medir la presión con un error máximo de 10 Pa respecto del valor real.	**OIRSA** Mejor redacción del texto *Category : EDITORIAL*
688	100	~~5~~6.2.7 **Instrumentos para medir la temperatura**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
689	100	~~5~~6.2.7 **Instrumentos para medir la temperatura**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
690	101	~~Sufficiently reliable~~ Reliable thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). The accuracy of the temperature	**IPPC Regional Workshop Asia** Retain this paragraph with deletion of "sufficiently". To include + or - before 0.5% for consistency in draft. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Thailand** Thailand agree with APPPC comment.

#	Para	Text	Comment
		measurement should be within + 0.5 °C of the actual temperature.	**Bangladesh** Bangladesh agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : TECHNICAL*
691	101	Sufficiently reliable calibrated thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). The accuracy of the temperature measurement should be within 0.5 °C of the actual temperature.	**Ozone Secretariat** Thermometers should be calibrated as per 5.2 *Category : TECHNICAL*
692	101	Sufficiently reliable thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). ~~The~~ Sufficient accuracy of the temperature measurement should be ~~within 0.5 °C of~~ ensured in order to measure the ~~actual~~ required temperature.	**Japan** See Japan's general comment. *Category : SUBSTANTIVE*
693	101	Sufficiently reliable thermometers should be used to measure ~~either continuously or~~ at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). The accuracy of the temperature measurement should be within 0.5 °C of the actual temperature.	**European Union** Omitting superfluous text. *Category : TECHNICAL*
694	101	Sufficiently reliable thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors	**European Union** For consistency with the draft standard on temperature treatments in which this requirement was deleted following comments made during first consultation. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		required will depend on the size of the treatment enclosure (see section 6.4). ~~The accuracy of the temperature measurement should be within 0.5 °C of the actual temperature.~~	
695	101	Sufficiently reliable thermometers should be used to measure ~~either continuously or~~ at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4)~~. The accuracy of the temperature measurement should be within 0~~.~~5 °C of the actual temperature.~~	**EPPO** For consistency with the draft standard on temperature treatments in which this requirement was deleted following comments made during first consultation. Omitting superfluous text *Category : TECHNICAL*
696	101	Sufficiently reliable thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). The accuracy of the temperature measurement should be within ~~0~~±0.5 °C of the actual temperature.	**IPPC Regional Workshop Near East** Adds clarity to the text. **Libya** agree *Category : EDITORIAL*
697	101	Sufficiently reliable thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). The accuracy of the temperature measurement should be within 0.5 °C of the actual temperature.	**IPPC Regional Workshop Near East** An annex can be added including detailed information or guidance for all safety equipment. For example, respirator types for different fumigants. **Libya** agree *Category : SUBSTANTIVE*
698	101	Sufficiently reliable thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and	**United States of America** First sentence: Suggest using data loggers with temperature sensors that store data. The temperatures must be taken on a approved interval and the temperatures need to be in real time. The temperatures must not be average reading. The data needs to be printed on demand. Last sentence: Too specific. Treatments should follow individual country requirements.

#	Para	Text	Comment
		during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). ~~The accuracy of the temperature measurement should be within 0.5 °C of the actual temperature.~~	*Category : TECHNICAL*
699	101	~~Sufficiently reliable~~ Calibrated thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). The accuracy of the temperature measurement should be within 0.5 °C of the actual temperature.	**New Zealand** Of course they should be reliable - that goes without saying ...but they must be calibrated *Category : TECHNICAL*
700	101	~~Sufficiently reliable~~ Reliable thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside, if appropriate, the commodity before ~~and during~~ fumigation. If necessary, the temperature of commodity during fumigation may be measured. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). The accuracy of the temperature measurement should be within 0.5 °C of the actual temperature.	**Korea, Republic of** *Category : EDITORIAL*
701	101	Sufficiently reliable thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). The accuracy of the temperature measurement should be within 0.5 °C of the actual temperature.	**Australia** The intent of these requirement is unclear. Common practices for fumigation is to use forecast information. Measuring actual temperature would be a significant change for general fumigations. Is this the intent of the change? *Category : SUBSTANTIVE*
702	101	~~Sufficiently reliable thermometers~~ Thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and	**Australia** Implied *Category : EDITORIAL*

#	Para	Text	Comment
		during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). The accuracy of the temperature measurement should be within 0.5 °C of the actual temperature.	
703	101	~~Sufficiently reliable~~ Reliable thermometers should be used to measure either continuously or at suitable intervals the temperature in the enclosure space and, as appropriate, the external surfaces and inside the commodity before and during fumigation. The number of temperature sensors required will depend on the size of the treatment enclosure (see section 6.4). The accuracy of the temperature measurement should be within 0.5 °C of the actual temperature.	**PPPO** remove sufficient *Category : SUBSTANTIVE*
704	101	Para medir la temperatura en el espacio del recinto, ya sea de manera continua o a intervalos adecuados, y, en caso pertinente, la de las superficies externas y la del interior del producto antes y durante la fumigación deberían utilizarse termómetros ~~suficientemente fiables~~calibrados por una entidad certificada según el país. El número de sensores de temperatura necesarios dependerá del tamaño del recinto de tratamiento (véase la sección 6.4). La medición de la temperatura debería tener un margen de exactitud de 0,5 °C respecto a la temperatura real.	**Colombia** Refuerza y legitima los resultados del proceso de calibración. *Category : SUBSTANTIVE*
705	101	Para medir la temperatura en el espacio del recinto, ya sea de manera continua o a intervalos adecuados, y, en caso pertinente, la de las superficies externas y la del interior del producto antes y durante la fumigación deberían utilizarse termómetros ~~suficientemente fiables~~calibrados. El número de sensores de temperatura necesarios dependerá del tamaño del recinto de tratamiento (véase la sección ~~6~~7.4). La medición de la temperatura debería tener un margen de exactitud de 0,5 °C respecto a la temperatura real.	**Panama** mejor uso de términos y secuencia lógica de los puntos *Category : EDITORIAL*
706	101	Para medir la temperatura en el espacio del recinto, ya sea de manera continua o a intervalos adecuados, y, en caso pertinente, la de las superficies externas y la del interior del producto antes y durante la fumigación deberían utilizarse	**OIRSA** Mejor uso de términos *Category : EDITORIAL*

#	Para	Text	Comment
		termómetros ~~suficientemente fiables~~calibrados. El número de sensores de temperatura necesarios dependerá del tamaño del recinto de tratamiento (véase la sección ~~6~~7.4). La medición de la temperatura debería tener un margen de exactitud de 0,5 °C respecto a la temperatura real.	
707	102	**~~5~~6.2.8 Instrumentos para monitorear la concentración de gas**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
708	102	**~~5~~6.2.8 Instrumentos para monitorear la concentración de gas**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
709	103	The equipment required to measure the fumigant concentration within the enclosure will depend on the type of gas used. The equipment used should have an ~~accuracy~~ adequate accuracy (e.g. ± 5 %) of ~~±5% of~~ measuring the fumigant concentration to be achieved throughout the fumigation. The monitoring equipment (e.g. lines) exposed to the fumigant should be constructed from materials that do not absorb the fumigant. Fumigant monitoring lines should be placed as far as possible from fumigant supply lines or dispensers, and in the area or areas of the enclosure likely to have the lowest concentration of fumigant.	**IPPC Regional Workshop Asia** Regional general comment: where reqm are identified as specific nos e.g 5%, technical justifications should be provided for that requirements. **APPPC** agreed by APPPC **Thailand** Thailand agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : TECHNICAL*
710	103	The equipment required to measure the fumigant concentration within the enclosure will depend on the type of gas used. The equipment used should have an accuracy of ~~±5%~~ ±10% of the fumigant concentration to be achieved throughout the fumigation. The monitoring equipment (e.g. lines) exposed to the fumigant should be constructed from materials that do not absorb the fumigant. Fumigant monitoring lines should be placed as far as possible from fumigant supply lines or dispensers, and in the area or areas of the enclosure likely to have the lowest concentration of fumigant.	**Ozone Secretariat** Monitoring of some gases such as PH3 is particuarly differcult to do with accuracy (Danlety 2005) *Category : TECHNICAL*
711	103	The equipment required to measure the fumigant concentration within the enclosure will depend on the type of gas used. The equipment used should ~~have~~ be ensured with an ~~accuracy~~ adequate level of ~~±5%~~ accuracy of the	**Japan** See Japan's general comment. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		fumigant concentration to be achieved throughout the fumigation. The monitoring equipment (e.g. lines) exposed to the fumigant should be constructed from materials that do not absorb the fumigant. Fumigant monitoring lines should be placed as far as possible from fumigant supply lines or dispensers, and in the area or areas of the enclosure likely to have the lowest concentration of fumigant.	
712	103	The equipment required to measure the fumigant concentration within the enclosure will depend on the type of gas used. The equipment used should have an accuracy ~~of ±5% of~~ based on the ~~fumigant concentration to be achieved throughout the fumigation~~manufacturer's requirements. The monitoring equipment (e.g. lines) exposed to the fumigant should be constructed from materials that do not absorb the fumigant. Fumigant monitoring lines should be placed as far as possible from fumigant supply lines or dispensers, and in the area or areas of the enclosure likely to have the lowest concentration of fumigant.	**United States of America** Second sentence: Accuracy should be based on the manufacturer's specifications Third sentence: Fumiscopes require Drierite and Ascarite for moisture and carbon dioxide. *Category : TECHNICAL*
713	103	The equipment required to measure the fumigant concentration within the enclosure will depend on the type of gas used. The equipment used should have an accuracy of ~~±5%~~ ±10% of the fumigant concentration to be achieved throughout the fumigation. The monitoring equipment (e.g. lines) exposed to the fumigant should be constructed from materials that do not absorb the fumigant. Fumigant monitoring lines should be placed as far as possible from fumigant supply lines or dispensers, and in the area or areas of the enclosure likely to have the lowest concentration of fumigant.	**Korea, Republic of** In case of ethyl formate, it should be ±10%. *Category : TECHNICAL*
714	103	The equipment required to measure the fumigant concentration within the enclosure will depend on the type of gas used. The equipment used should have an accuracy of ±5% of the fumigant concentration to be achieved throughout the fumigation. The monitoring ~~equipment (e.g. lines)~~ equipment exposed to the fumigant should be constructed from materials that do not absorb the fumigant. Fumigant monitoring lines should be placed as far as	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*

#	Para	Text	Comment
		possible from fumigant supply lines or dispensers, and in the area or areas of the enclosure likely to have the lowest concentration of fumigant.	
715	103	The equipment required to measure the fumigant concentration within the enclosure will depend on the type of gas used. The equipment used should have an accuracy of ±5% of the fumigant ~~concentration to be achieved throughout the fumigation.~~ concentration.The monitoring equipment (e.g. lines) exposed to the fumigant should be constructed from materials that do not absorb the fumigant. Fumigant monitoring lines should be placed as far as possible from fumigant supply lines or dispensers, and in the area or areas of the enclosure likely to have the lowest concentration of fumigant.	**Azerbaijan** *Category : EDITORIAL*
716	103	El equipo necesario para medir la concentración de fumigante dentro del recinto dependerá del tipo de gas utilizado. Debería utilizarse un equipo con una exactitud de ± 5 % de la concentración de fumigante que ha de alcanzarse durante la fumigación. El equipo de monitoreo (p. ej., los conductos) expuesto al fumigante debería estar fabricado con materiales que no lo absorban~~.~~ . Las líneas de monitoreo del fumigante deberían ubicarse lo más lejos posible de los conductos de alimentación o difusores del fumigante y en la zona o zonas del recinto en las que la concentración de fumigante probablemente sea más baja.	**Panama** Se solicita al coordinador de la norma que de ejemplos de los materiales que componen el equipo de monitoreo. *Category : SUBSTANTIVE*
717	103	El equipo necesario para medir la concentración de fumigante dentro del recinto dependerá del tipo de gas utilizado. Debería utilizarse un equipo con una exactitud de ± 5 % de la concentración de fumigante que ha de alcanzarse durante la fumigación. ~~El equipo de monitoreo (p. ej., los conductos) expuesto al fumigante debería estar fabricado con materiales que no lo absorban.~~ **El equipo de monitoreo (p. ej., los conductos) expuesto al fumigante debería estar fabricado con materiales que no lo absorban.** Las líneas de monitoreo del fumigante deberían ubicarse lo más lejos posible de los conductos de alimentación o difusores del fumigante y en la zona o zonas del recinto en las que la concentración de fumigante	**OIRSA** Se solicita al coordinador de la norma que de ejemplos de los materiales que componen el equipo de monitoreo. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		probablemente sea más baja.	
718	104	**5.2.9 Safety equipment**	**Oman** Need to include detailed information or guidance for all safety equipment. For example, respirator types for different fumigants. This can be added as an annex to this standard *Category : SUBSTANTIVE*
719	104	~~5~~62.~~2.~~9 **Equipo de seguridad**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
720	104	~~5~~6.2.9 **Equipo de seguridad**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
721	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment ~~may need to~~ should be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Antigua and Barbuda** The availability of these items should not be left to discretion. These should be available, particularly because of the mammalian toxicity of fumigants in general. *Category : SUBSTANTIVE*
722	105	Most fumigants are toxic to humans. Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Antigua and Barbuda** Inclusion of this introductory sentence sets the tone for this paragraph. *Category : SUBSTANTIVE*
723	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. ~~Depending on the fumigant being used,~~ These may include protective clothing, respirators and suitably sensitive monitoring ~~equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation~~equipment.	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : TECHNICAL*
724	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. ~~Depending on the fumigant being used,~~ These may include protective	**IPPC Regional Workshop Latin America** To simplify the text. *Category : TECHNICAL*

#	Para	Text	Comment
		clothing, respirators and suitably sensitive monitoring ~~equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation~~equipment.	
725	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment ~~may need to~~ should be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**IPPC Regional Workshop Asia** replace may be to should. **APPPC** agreed by APPPC **China** China agreed to this regional comments. **Thailand** Thailand agree with APPPC comment. **Korea, Republic of** Republic of Korea agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Japan** Japan support regional comment. **Viet Nam** Vietnam agreed with this APPPC comment. *Category : SUBSTANTIVE*
726	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators self breathing devices and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Peru** In some cases self breathing devices are also needed *Category : TECHNICAL*
727	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Brazil** "Respirators" should be translated into Spanish as "máscaras anti-gases" *Category : TRANSLATION*
728	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, ~~respirators~~ respirators, self breathing devices and suitably sensitive monitoring equipment may need to be made available to	**Brazil** In some cases self breathing devices are also needed *Category : TECHNICAL*

#	Para	Text	Comment
		those handling the fumigant or undertaking or monitoring the fumigation.	
729	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, ~~respirators~~ respirators, self breathing devices and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Argentina** In some cases self breathing devices are also needed *Category : TECHNICAL*
730	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Argentina** "Respirators" should be translated into Spanish as "máscaras anti-gases" *Category : TRANSLATION*
731	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment ~~may need to~~ should be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Japan** "Should" is better because these equipments relate directly to human health. *Category : SUBSTANTIVE*
732	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to should be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Guyana** Suggest replace "may need to" with should *Category : SUBSTANTIVE*
733	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment ~~may need to~~ may need to -should be made available to those handling the	**Guyana** Suggest replace "may need to" with should *Category : SUBSTANTIVE*

#	Para	Text	Comment
		fumigant or undertaking or monitoring the fumigation.	
734	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. ~~Depending on the fumigant being used,~~ These may include protective clothing, respirators and suitably sensitive monitoring ~~equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation~~equipment.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 0:15 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
735	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation. Appropriate storage conditions of fumigation products and application safety requirements should be maintained in accordance with applicable regulations.	**European Union** We consider it very important to add a point specifying storage conditions of fumigation products. *Category : TECHNICAL*
736	105	Most fumigants are toxic to humans.Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment ~~may need to -~~ should be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Saint Vincent and The Grenadines** *Category : SUBSTANTIVE*
737	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Saint Vincent and The Grenadines** "Should" carries a stronger imperative than "may need to be" *Category : SUBSTANTIVE*
738	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at	**EPPO** It is considered very important to add a point specifying storage conditions of fumigation products.

#	Para	Text	Comment
		all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation. Appropriate storage conditions of fumigation products and safety application requirements should be maintained in accordance with applicable regulations.	*Category : TECHNICAL*
739	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Trinidad and Tobago** Suggest adding opening sentence *Category : SUBSTANTIVE*
740	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Trinidad and Tobago** "Should" carries a stronger imperative than "may need to be" *Category : SUBSTANTIVE*
741	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**United States of America** Last sentence: suggest adding an eye wash station *Category : TECHNICAL*
742	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, ~~respirators~~ respirators, antidotes and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**New Zealand** It is appropriate for fumigators using cyanide based fumigants to have antidotes available. *Category : TECHNICAL*
743	105	Equipment suitable for ensuring the safety of those	**Uruguay** "Respirators" should be translated into Spanish as "máscaras anti-gases"

#	Para	Text	Comment
		potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	*Category : TRANSLATION*
744	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, ~~respirators~~ respirators, self breathing devices and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Uruguay** In some cases self breathing devices are also needed *Category : TECHNICAL*
745	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Jamaica** "Should" carries a stronger imperative than "may need to be" *Category : SUBSTANTIVE*
746	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**IPPC Regional Workshop Caribbean** "Should" carries a stronger imperative than "may need to be" *Category : SUBSTANTIVE*
747	105	~~Equipment~~ Most fumigants are toxic to humans therefore, equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment ~~may need to~~ should be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Jamaica** replace may need to with should. *Category : SUBSTANTIVE*
748	105	Most fumigants are toxic to humans. Equipment suitable	**IPPC Regional Workshop Caribbean** Suggest adding opening sentence

#	Para	Text	Comment
		for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	*Category : SUBSTANTIVE*
749	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment ~~may need to~~ should be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Singapore** To replace " may need to" which sounds voluntarily to "should" as PPE for human safety should be a critical requirement in every country. *Category : SUBSTANTIVE*
750	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment ~~may need to~~ must be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**Philippines** *Category : SUBSTANTIVE*
751	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, ~~respirators~~ respirators, self breathing devices and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**COSAVE** "self breathing devices" in some cases is needed. *Category : TECHNICAL*
752	105	Equipment suitable for ensuring the safety of those potentially exposed to the fumigant should be available at all times and in appropriate working order. Depending on the fumigant being used, protective clothing, respirators and suitably sensitive monitoring equipment may need to be made available to those handling the fumigant or undertaking or monitoring the fumigation.	**COSAVE** "respirators" should be translated as "máscaras anti-gases" *Category : TRANSLATION*
753	105	Debería disponerse en todo momento de equipo adecuado	**Colombia** Es necesario proteger al personal operativo.

#	Para	Text	Comment
		para garantizar la seguridad de las personas que pudieran exponerse al fumigante, y debería mantenerse siempre en buenas condiciones de funcionamiento. ~~Dependiendo del fumigante que se esté utilizando, podrá ser~~ Es necesario poner a disposición de quienes manejan el fumigante o realizan o monitorean la fumigación indumentaria protectora, mascarillas ~~anti-humo~~ anti-humo, filtros especiales para cada gas, guantes, overoles especiales y equipo de monitoreo suficientemente sensible.	*Category : SUBSTANTIVE*
754	105	~~Debería~~ Debe disponerse en todo momento de equipo adecuado para garantizar la seguridad de las personas que pudieran exponerse al fumigante, y debería mantenerse siempre en buenas condiciones de funcionamiento. Dependiendo del fumigante que se esté utilizando, ~~podrá ser~~ es necesario poner a disposición de quienes manejan el fumigante o realizan o monitorean la ~~fumigación~~ fumigación, la indumentaria protectora, mascarillas anti-humo y equipo de monitoreo suficientemente sensible, para detectar fugas.	**Panama** Mejor comprensión del Texto *Category : TECHNICAL*
755	105	~~Debería~~ Debe disponerse en todo momento de equipo adecuado para garantizar la seguridad de las personas que pudieran exponerse al fumigante, y debería mantenerse siempre en buenas condiciones de funcionamiento. Dependiendo del fumigante que se esté utilizando, ~~podrá ser~~ es necesario poner a disposición de quienes manejan el fumigante o realizan o monitorean la ~~fumigación~~ fumigación, la indumentaria protectora, mascarillas ~~anti-humo~~ anti-gas y equipo de monitoreo suficientemente sensible, para detectar fugas.	**OIRSA** Mejor comprensión del Texto *Category : TECHNICAL*
756	106	**5.2.10 Equipment to capture or recycle fumigant emissions**	**United States of America** This section is not relevant for application of fumigation as a phytosanitary measure *Category : SUBSTANTIVE*
757	106	**5.2.10 Equipment to capture or recycle fumigant emissions**	**Oman** Need to include detailed information or description about recapturing the fumigants or provide guidance to links that can provide more technical and descriptive information. *Category : SUBSTANTIVE*
758	106	**5.2.10 Equipo para capturar ~~o reciclar~~ las emisiones de fumigante**	**Panama** En el caso de uso de gas no es posible "reciclar". *Category : TECHNICAL*

#	Para	Text	Comment
759	106	**~~5~~6.2.10 Equipo para capturar ~~o reciclar~~ las emisiones de fumigante**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. En el caso de uso de gas no es posible "reciclar". *Category : TECHNICAL*
760	107	The use of equipment that can capture the fumigant gas for recycling, reuse or safe disposal is encouraged for safety and environmental reasons. Release of fumigant gas (e.g. methyl bromide) to the atmosphere should be minimised ~~where it is possible to do so~~.	**European Union** Useless. *Category : EDITORIAL*
761	107	The use of equipment that can capture the fumigant gas for recycling, reuse or safe disposal is encouraged for safety and environmental reasons. Release of fumigant gas (e.g. methyl bromide) to the atmosphere should be ~~minimised where it is possible to do so~~minimised.	**EPPO** Useless. *Category : EDITORIAL*
762	107	The use of equipment that can capture the fumigant gas for recycling, reuse or safe disposal is ~~encouraged~~ recommended for safety and environmental reasons. Release of fumigant gas (e.g. methyl bromide) to the atmosphere should be minimised where it is possible to do so.	**IPPC Regional Workshop Near East** proposal to replace encouraged with "recommended" it is a stronger term in order to emphasise how favorable this process can be to the safety of environment. **Libya** agree *Category : EDITORIAL*
763	107	The use of equipment that can capture the fumigant gas for recycling, reuse or safe disposal is encouraged for safety and environmental reasons. Release of fumigant gas (e.g. methyl bromide) to the atmosphere should be minimised where it is possible to do so.	**IPPC Regional Workshop Near East** Need to include detailed information or description about recapturing the fumigants or provide guidance to links that can provide more technical and descriptive information. **Libya** agree *Category : SUBSTANTIVE*
764	107	The use of equipment that can capture the fumigant gas for recycling, reuse or safe disposal is encouraged for safety and environmental reasons. Release of fumigant gas ~~(e.g. methyl bromide)~~ to the atmosphere should be minimised where it is possible to do so.	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*
765	107	The use of equipment that can capture the fumigant gas for ~~recycling,~~ reuse or safe disposal is encouraged for safety and environmental reasons. Release of fumigant gas (e.g. methyl bromide) to the atmosphere should be minimised where it is possible to do so.	**China** Reuse includes recycling. *Category : EDITORIAL*
766	107	Por motivos ~~medioambientales~~ ambientales y de seguridad, se alienta a utilizar equipo que permita capturar el gas	**Panama** Mejor uso de términos, en el caso de uso de gas no es posible "reciclar".

#	Para	Text	Comment
		fumigante para su ~~reciclado,~~ reutilización o eliminación segura. La liberación de gas fumigante (p. ej., bromuro de metilo) a la atmósfera debería reducirse al mínimo siempre que sea posible.	*Category : EDITORIAL*
767	107	Por motivos medioambientales y de seguridad, se ~~alienta~~ recomienda a utilizar equipo que permita capturar el gas fumigante para su reciclado, reutilización o eliminación segura. La liberación de gas fumigante (p. ej., bromuro de metilo) a la atmósfera debería reducirse al mínimo siempre que sea posible.	**Colombia** Mejor redacción. *Category : EDITORIAL*
768	107	Por motivos medioambientales y de seguridad, se alienta a utilizar un equipo que permita capturar el gas fumigante para su reciclado, reutilización o eliminación segura. La liberación de gas fumigante (p. ej., bromuro de metilo) a la atmósfera debería reducirse al mínimo siempre que sea posible.	**Cuba** *Category : EDITORIAL*
769	107	Por motivos ~~medioambientales~~ ambientales y de seguridad, se alienta a utilizar equipo que permita capturar el gas fumigante para su ~~reciclado,~~ reutilización o eliminación segura. La liberación de gas fumigante (p. ej., bromuro de metilo) a la atmósfera debería reducirse al mínimo siempre que sea posible.	**OIRSA** Mejor uso de términos, en el caso de uso de gas no es posible "reciclar". *Category : EDITORIAL*
770	108	**6. Fumigation Procedures**	**Ozone Secretariat** The section is missing some gas specific guidance relevant to a successful treatment. *Category : SUBSTANTIVE*
771	108	**6. Fumigation Procedures**	**United States of America** We suggest removing this entire section 6. Treatments should be completed based on the receiving country's requirements. Also, the formulas have errors. Additionally, this section is confusing (e.g. 6.4) and is more like a manual rather than international guidance. *Category : SUBSTANTIVE*
772	108	**~~6~~7. Procedimientos de fumigación**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
773	108	**~~6~~7. Procedimientos de fumigación**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
774	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and	**IPPC Regional Workshop Asia** To add in (where required) to allow for situation where these are not required. **APPPC**

#	Para	Text	Comment
		atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment ~~should~~ (where required)should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Thailand** Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : TECHNICAL*
775	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity characteristics that relate to penetration of fumigant, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the	**Canada** Technical detail. *Category : TECHNICAL*

#	Para	Text	Comment
		required efficacy.	
776	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging ~~materials~~ should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	**Peru** "material" deleted because it is redundant as per definition of "packaging" in ISPM 5 *Category : TECHNICAL*
777	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is	**United States of America** Suggest defining the term load factor *Category : TECHNICAL*

#	Para	Text	Comment
		essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	
778	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging ~~materials~~ should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	**Brazil** "material" deleted because it is redundant as per definition of "packaging" in ISPM 5 *Category : TECHNICAL*
779	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. ~~Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration.~~ Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead	**Ozone Secretariat** Move to sorption para 6.3 *Category : TECHNICAL*

#	Para	Text	Comment
		to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	
780	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging ~~materials~~ should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	**Argentina** "material" deleted because it is redundant as per definition of "packaging" in ISPM 5 *Category : TECHNICAL*
781	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous	**Argentina** "Tightness" should be translated into Spanish as "hermeticidad". See comment in paragraph 85 *Category : TRANSLATION*

#	Para	Text	Comment
		or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	
782	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity ~~load pattern~~ loading configuration and load ~~factor~~ ratio directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	**European Union** For consistency with within this and with other ISPMs. *Category : EDITORIAL*
783	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are	**European Union** To be more precise. *Category : TECHNICAL*

#	Para	Text	Comment
		achieved and maintained within the enclosure during fumigation. ~~Some commodities~~Some substances, such as oil, fats or porous or finely ground materials, when present in a commodity, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	
784	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity ~~load pattern~~ loading configuration and load ~~factor~~ ratio directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some ~~commodities~~substances, such as oil, fats or porous or finely ground materials, when present in a commodity, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	**EPPO** For consistency with within this and with other ISPMs Reworded to be more precise *Category : TECHNICAL*
785	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation	**Uruguay** "Tightness" should be translated into Spanish as "hermeticidad". See comment in paragraph 85 *Category : TRANSLATION*

#	Para	Text	Comment
		equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	
786	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging ~~materials~~ should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	**Uruguay** "material" deleted because it is redundant as per definition of "packaging" in ISPM 5 *Category : TECHNICAL*
787	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor	**Australia** To much detail for this section, it's inconsistent with other heading sections throughout the document. A lot of information is being repeated or reworded in subsequent paragraphs. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. ~~Some commodities~~Many factors may affect fumigation efficacy. Fumigant concentration, ~~such as oil~~exposure time, ~~fats or porous or finely ground materials, may absorb a large quantity~~ commodity temperature and atmospheric temperature are crucial factors. Gas tightness of ~~fumigant~~ the enclosure, commodity load pattern and ~~lead to a reduction in~~ load factor directly influence gas ~~concentration~~distribution and gas concentration during fumigation. ~~Packaging materials~~ The fumigant supply and circulation equipment should be ~~of~~ arranged within the fumigation enclosure in a ~~composition and construction~~ way that ~~does not preclude fumigant gas penetration to~~ ensures that the ~~commodity and prevent~~ fumigant concentrations ~~achieving~~ required ~~levels. In summary, it is essential that~~ by the ~~fumigation enclosure and equipment~~ treatment schedule are ~~well prepared prior to fumigation in order to achieve~~ achieved and maintained within the ~~required efficacy~~enclosure during fumigation.	
788	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment ~~should~~ may be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and	**Korea, Republic of** *Category : TECHNICAL*

#	Para	Text	Comment
		construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	
789	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way ~~that ensures that~~ to ensure the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	**Singapore** For better sentence structure to use " to ensure" instead of "that ensures that" *Category : EDITORIAL*
790	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way to ensure that ~~ensures that~~ the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of	**Thailand** grammatically correct. *Category : EDITORIAL*

#	Para	Text	Comment
		fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	
791	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor (?) directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	**Philippines** Define load factor or cite examples of load factor. *Category : SUBSTANTIVE*
792	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during	**COSAVE** "materials" is redundant as per definition of "packaging" in ISPM 5 *Category : EDITORIAL*

#	Para	Text	Comment
		fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging ~~materials~~ should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	
793	109	Many factors may affect fumigation efficacy. Fumigant concentration, exposure time, commodity temperature and atmospheric temperature are crucial factors. Gas tightness of the enclosure, commodity load pattern and load factor directly influence gas distribution and gas concentration during fumigation. The fumigant supply and circulation equipment should be arranged within the fumigation enclosure in a way that ensures that the fumigant concentrations required by the treatment schedule are achieved and maintained within the enclosure during fumigation. Some commodities, such as oil, fats or porous or finely ground materials, may absorb a large quantity of fumigant and lead to a reduction in gas concentration. Packaging materials should be of a composition and construction that does not preclude fumigant gas penetration to the commodity and prevent fumigant concentrations achieving required levels. In summary, it is essential that the fumigation enclosure and equipment are well prepared prior to fumigation in order to achieve the required efficacy.	**COSAVE** "tightness" See comments para. 85 *Category : TRANSLATION*
794	109	La eficacia de la fumigación podrá verse afectada por muchos factores; entre ellos son fundamentales la concentración de fumigante, el tiempo de exposición, la temperatura del producto y la temperatura atmosférica. La ~~estanqueidad~~ hermeticidad al gas del recinto, el patrón de carga y el coeficiente de carga del producto influyen directamente en la distribución y la concentración del gas durante la fumigación. El equipo de suministro y	**Panama** Se solicita al coordinador de la norma una lista de productos que son altamente sorcitivos. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		circulación del fumigante debería disponerse dentro del recinto de fumigación de tal manera que se garantice que se alcanzan las concentraciones de fumigante requeridas por el protocolo de tratamiento y que se mantienen durante la fumigación. Algunos productos como el aceite, las grasas o los materiales porosos o finamente molidos podrán absorber una gran cantidad de fumigante y ocasionar una disminución de la concentración de gas. La composición y la estructura de los materiales de embalaje no debería impedir la penetración del gas fumigante en el producto ni que se alcancen las concentraciones de fumigantes requeridas. En resumen, para alcanzar el nivel de eficacia requerido es imprescindible que el recinto y el equipo de fumigación estén adecuadamente preparados antes de la fumigación.	
795	109	La eficacia de la fumigación podrá verse afectada por muchos factores; entre ellos son fundamentales la concentración de fumigante, el tiempo de exposición, la temperatura del ~~producto y~~ producto, la temperatura atmosférica, la humedad del producto y la del ambiente circundante. La estanqueidad al gas del recinto, el patrón de carga y el coeficiente de carga del producto influyen directamente en la distribución y la concentración del gas durante la fumigación. El equipo de suministro y circulación del fumigante debería disponerse dentro del recinto de fumigación de tal manera que se garantice que se alcanzan las concentraciones de fumigante requeridas por el protocolo de tratamiento y que se mantienen durante la fumigación. Algunos productos como el aceite, las grasas o los materiales porosos o finamente molidos podrán absorber una gran cantidad de fumigante y ocasionar una disminución de la concentración de gas. La composición y la estructura de los materiales de embalaje no debería impedir la penetración del gas fumigante en el producto ni que se alcancen las concentraciones de fumigantes requeridas. En resumen, para alcanzar el nivel de eficacia requerido es imprescindible que el recinto y el equipo de fumigación estén adecuadamente preparados antes de la	**Colombia** El contenido de humedad puede afectar la eficiencia del gas. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		fumigación.	
796	109	La eficacia de la fumigación podrá verse afectada por muchos factores; entre ellos son fundamentales la concentración de fumigante, el tiempo de exposición, la temperatura del producto y la temperatura atmosférica. La ~~estanqueidad~~ hermeticidad al gas del recinto, el patrón de carga y el coeficiente de carga del producto influyen directamente en la distribución y la concentración del gas durante la fumigación. El equipo de suministro y circulación del fumigante debería disponerse dentro del recinto de fumigación de tal manera que se garantice que se alcanzan las concentraciones de fumigante requeridas por el protocolo de tratamiento y que se mantienen durante la fumigación. ~~Algunos productos como el aceite, las grasas o los materiales porosos o finamente molidos podrán absorber una gran cantidad de fumigante y ocasionar una disminución de la concentración de gas.~~ **Algunos productos como el aceite, las grasas o los materiales porosos o finamente molidos podrán absorber una gran cantidad de fumigante y ocasionar una disminución de la concentración de gas.** La composición y la estructura de los materiales de embalaje no debería impedir la penetración del gas fumigante en el producto ni que se alcancen las concentraciones de fumigantes requeridas. En resumen, para alcanzar el nivel de eficacia requerido es imprescindible que el recinto y el equipo de fumigación estén adecuadamente preparados antes de la fumigación.	**OIRSA** Se solicita al coordinador de la norma una lista de productos que son altamente sorcitivos. *Category : SUBSTANTIVE*
797	110	**7~~6~~.1 Carga del producto**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
798	110	**~~6~~7.1 Carga del producto**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
799	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such	**IPPC Regional Workshop Asia** Refer to general comment on figures cited in this draft ie technical justifications to be provided. **APPPC** agreed by APPPC **Malaysia**

#	Para	Text	Comment
		as pieces of wood should be used. As a guide, and depending on the fumigant used, for container fumigations there should be 200 mm free air space above the commodity, 50 mm below, and 100 mm at the sides and between the commodities.	Malaysia agreed with APPPC **Thailand** Thailand agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Japan** Japan support regional comment. **Viet Nam** Vietnam agreed with this APPPC comment. *Category : TECHNICAL*
800	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be ~~used~~used for not sturdy tarpaulin "tents type of enclosures. As a guide, and depending on the fumigant used, for container fumigations there should be 200 mm free air space above the commodity, 50 mm below, and 100 mm at the sides and between the commodities.	**Canada** *Category : TECHNICAL*
801	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration ~~into~~ to the ~~commodity, separators such as pieces of wood should be used. As a guide, and depending on the fumigant used, for container fumigations~~ target pest there should be ~~200 mm~~ sufficient free air space preferably both above and below the commodity, ~~50 mm below,~~ and ~~100 mm~~ at the sides and between the commodities. The gaps needed depend on the commodity, where the pest is located and gas used e.g. 5mm gaps every 200mm of timber.	**Ozone Secretariat** Every commodity pest combination situation is different. *Category : TECHNICAL*
802	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be used. ~~As a guide, and depending~~ Depending on the fumigant used, for container fumigations there should be ~~200 mm free~~ appropriate air space above and below the commodity, ~~50 mm below,~~ and	**Japan** See Japan's general comment. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~100 mm~~ at the sides and between the commodities.	
803	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be used. As a guide, and depending on the fumigant used, for container fumigations there should be ~~200 mm~~ 20 cm free air space above the commodity, ~~50 mm~~ 5 cm below, and ~~100 mm~~ 10 cm at the sides and between the commodities.	**European Union** Easier to read (see ISPM 15 and paragraph 113 of this standard). *Category : EDITORIAL*
804	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be used. As a guide, and depending on the fumigant used, for container fumigations there should be 200 mm free air space above the commodity, 50 mm below, and 100 mm at the sides and between the commodities.	**European Union** It should be made clear that this paragraph refers to containers and not to bulk cargo. *Category : SUBSTANTIVE*
805	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be used. As a guide, and depending on the fumigant used, for container fumigations there should be 200 mm free air space above the commodity, 50 mm below, and 100 mm at the sides and between the commodities.	**EPPO** It should be made clear that this paragraph refers to containers and not to bulk cargo. *Category : SUBSTANTIVE*
806	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be used. As a guide, and depending on the fumigant used, for container fumigations there should be ~~200 mm~~ 20 cm free air space above the commodity, ~~50 mm~~ 5 cm below, and ~~100 mm~~ 10 cm at the sides and between the commodities.	**EPPO** Easier to read (see ISPM 15 and paragraph 113 of this standard). *Category : EDITORIAL*

#	Para	Text	Comment
807	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be used. ~~As a guide, and depending on the fumigant used, for container fumigations there should be 200 mm free air space above the commodity, 50 mm below, and 100 mm at the sides and between the commodities.~~	**United States of America** Last sentence: NPPOs have different air space. At a minimum suggest deleting the numbers, or suggest stating, for example. But, we do not recommend adding examples in a standard. *Category : TECHNICAL*
808	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, ~~separators such as pieces of wood~~ separators should be used. As a guide, and depending on the fumigant used, for container fumigations there should be 200 mm free air space above the commodity, 50 mm below, and 100 mm at the sides and between the commodities.	**Australia** Example adds nothing. *Category : TECHNICAL*
809	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be used. As a guide, and depending on the fumigant used, for container ~~fumigations~~ fumigation there should be ~~200 mm~~ secured sufficient free air space ~~above the commodity~~above, ~~50 mm~~ below, ~~and 100 mm at the~~ sides and between the commodities.	**Korea, Republic of** Condition is too specific. *Category : TECHNICAL*
810	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be used. As a guide, and depending on the fumigant used, for container fumigations there should be at least 200 mm free air space above the commodity, at least 50 mm below, and at least 100 mm at the sides and between the commodities.	**Singapore** To include "at least" to cater to the minimum requirements where practically possible. *Category : SUBSTANTIVE*
811	111	Before fumigation, the commodity should be loaded into	**Thailand** It is difficult to practice under the specific number of spacing for container fumigation. This

#	Para	Text	Comment
		the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be used. As a guide, and depending on the fumigant used, for container fumigations there should be at least 200 mm free air space above the commodity, at least 50 mm below, and at least 100 mm at the sides and between the commodities.	should be specified as a minimum requirement by adding the term "at least" in front of the number. *Category : SUBSTANTIVE*
812	111	Before fumigation, the commodity should be loaded into the fumigation enclosure in a manner that ensures sufficient space for adequate circulation of the fumigant. To ensure fumigant penetration into the commodity, separators such as pieces of wood should be used. As a guide, and depending on the fumigant used, for container fumigations there should be 200 mm free air space above the commodity, 50 mm below, and 100 mm at the sides and ~~between the~~ between commodities.	**Philippines** *Category : EDITORIAL*
813	111	Antes de la fumigación, el producto debería cargarse en el recinto de fumigación de manera tal que se garantice la disponibilidad de espacio suficiente para que el fumigante circule adecuadamente. Para garantizar la penetración del fumigante en el producto ~~deberían~~ debería utilizarse separadores, como piezas de madera. A título orientativo, para la fumigación de contenedores debería haber, dependiendo del fumigante utilizado, 200 mm de espacio libre por encima del producto, 50 mm por debajo y 100 mm a los lados y entre los productos.	**Nicaragua** Nicaragua considera que como este documento es mandatorio es preciso cambiar el verbo DEBERIA que aparece en todo el documento por el verbo DEBE. *Category : TECHNICAL*
814	111	Antes de la fumigación, el producto debería ~~cargarse en el~~ acomodarse dentro del recinto de fumigación de manera tal que se garantice la disponibilidad de espacio suficiente para que el fumigante circule adecuadamente. Para garantizar la penetración del fumigante en el producto deberían utilizarse separadores~~, como piezas de madera~~. A título orientativo, para la fumigación de contenedores debería haber, dependiendo del fumigante utilizado, 200 mm de espacio libre por encima del producto, 50 mm por debajo y 100 mm a los lados y entre los productos.	**Panama** Para clarificar más el texto, y ampliar las opciones de posibles separadores *Category : TECHNICAL*

#	Para	Text	Comment
815	111	Antes de la fumigación, el producto debería ~~cargarse en el~~ acomodarse dentro del recinto de fumigación de manera tal que se garantice la disponibilidad de espacio suficiente para que el fumigante circule adecuadamente. Para garantizar la penetración del fumigante en el producto deberían utilizarse separadores, ~~como piezas de madera.~~ A título orientativo, para la fumigación de contenedores debería haber, dependiendo del fumigante utilizado, 200 mm de espacio libre por encima del producto, 50 mm por debajo y 100 mm a los lados y entre los productos.	**OIRSA** Para clarificar más el texto, y ampliar las opciones de posibles separadores *Category : TECHNICAL*
816	112	**6.2 ~~Fumigant impenetrable packaging~~Packaging**	**COSAVE** To simplify title of the section *Category : EDITORIAL*
817	112	**6.2 ~~Fumigant impenetrable packaging~~Packaging**	**Peru** To simplify title of the section *Category : EDITORIAL*
818	112	**6.2 ~~Fumigant impenetrable packaging~~Packaging**	**Brazil** To simplify title of the section *Category : EDITORIAL*
819	112	**6.2 P~~Fumigant impenetrable packaging~~ackaging**	**Argentina** To simplify title of the section *Category : EDITORIAL*
820	112	**6.2 P~~Fumigant impenetrable packaging~~ackaging**	**Uruguay** To simplify title of the section *Category : EDITORIAL*
821	112	**~~6~~7.2 Embalaje impenetrable por el fumigante**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
822	112	**~~6~~7.2 Embalaje impenetrable por el fumigante**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
823	113	Fumigant-impenetrable packing material or coatings should be removed or punctured to ensure adequate access for the fumigant. As a guide for most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains not less than four perforations of 6 mm diameter per 100 cm^2 (10 cm × 10 cm square) or not less than five perforations of 5 mm diameter per 100 cm^2. Plastic wraps containing numerous pinholes (at least six holes per cm^2) may also be considered acceptable.	**IPPC Regional Workshop Asia** Refer to regional general comments on figures cited - technical justifications to be provided. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Thailand** Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. **Japan**

#	Para	Text	Comment
		Perforated packaging materials should not be overlapped, as holes may become blocked.	Japan support regional comment. **Viet Nam** Vietnam agreed with this APPPC comment. *Category : TECHNICAL*
824	113	Fumigant-impenetrable ~~packing material~~ packaging or coatings should be removed or punctured to ensure adequate access for the fumigant. As a guide for most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains not less than four perforations of 6 mm diameter per 100 cm^2 (10 cm × 10 cm square) or not less than five perforations of 5 mm diameter per 100 cm^2. Plastic wraps containing numerous pinholes (at least six holes per cm^2) may also be considered acceptable. Perforated packaging materials should not be overlapped, as holes may become blocked.	**COSAVE** For consistency. See also comment in paragraph 109 *Category : TECHNICAL*
825	113	Fumigant-impenetrable packing ~~material~~ or coatings should be removed or punctured to ensure adequate access for the fumigant. As a guide for most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains not less than four perforations of 6 mm diameter per 100 cm^2 (10 cm × 10 cm square) or not less than five perforations of 5 mm diameter per 100 cm^2. Plastic wraps containing numerous pinholes (at least six holes per cm^2) may also be considered acceptable. Perforated packaging materials should not be overlapped, as holes may become blocked.	**Peru** For consistency. See also comment in paragraph 109 *Category : TECHNICAL*
826	113	Fumigant-impenetrable ~~packing material~~ packaging or coatings should be removed or punctured to ensure adequate access for the fumigant. As a guide for most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains not less than four perforations of 6 mm diameter per 100 cm^2 (10 cm × 10 cm square) or not less than five perforations of 5 mm diameter per 100 cm^2. Plastic wraps containing numerous pinholes (at least six holes per cm^2) may also be considered acceptable. Perforated packaging materials should not be overlapped, as holes may become blocked.	**Brazil** For consistency. See also comment in paragraph 109 *Category : TECHNICAL*
827	113	Fumigant-impenetrable packing material or coatings should	**Ozone Secretariat** As per para 12 above and pratially wrapped is ok.

#	Para	Text	Comment
		not fully enclose the target of the treatment – if it does then it needs to be removed or punctured to ensure adequate access for the fumigant. As a guide for most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains not less than four perforations of 6 mm diameter per 100 cm^2 (10 cm × 10 cm square) or not less than five perforations of 5 mm diameter per 100 cm^2. Plastic wraps containing numerous pinholes (at least six holes per cm^2) may also be considered acceptable. Perforated packaging materials should not be overlapped, as holes may become blocked.	*Category : TECHNICAL*
828	113	Fumigant-impenetrable packing material or coatings should be removed or punctured to ensure adequate access for the fumigant. As a guide for most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains not less than four perforations of 6 mm diameter per 100 cm^2 (10 cm × 10 cm square) or not less than five perforations of 5 mm diameter per 100 cm^2. Plastic wraps containing numerous pinholes (at least six holes per cm^2) may also be considered acceptable. Perforated packaging materials should not be overlapped, as holes may become blocked.	**Ozone Secretariat** Background data of the figures are not cited to examine these figures are appropriate. Specific example of figures for the rate of penetration and aeration of packaging should not be specified because the figures change depending on type of commodity or material of packaging. *Category : TECHNICAL*
829	113	Fumigant-impenetrable ~~packing material~~ packaging or coatings should be removed or punctured to ensure adequate access for the fumigant. As a guide for most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains not less than four perforations of 6 mm diameter per 100 cm^2 (10 cm × 10 cm square) or not less than five perforations of 5 mm diameter per 100 cm^2. Plastic wraps containing numerous pinholes (at least six holes per cm^2) may also be considered acceptable. Perforated packaging materials should not be overlapped, as holes may become blocked.	**Argentina** For consistency. See also comment in paragraph 109 *Category : TECHNICAL*
830	113	Fumigant-impenetrable packing material or coatings should be removed or punctured to ensure adequate access for the fumigant. ~~As a guide for~~ For most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains ~~not less than four perforations~~	**Japan** See Japan's general comment. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		appropriate size and number of ~~6 mm diameter per 100 cm~~punctures and perforations[2] ~~(10 cm × 10 cm square) or not less than five perforations of 5 mm diameter per 100 cm~~. [2] ~~. Plastic wraps containing numerous pinholes (at least six~~ Perforated packaging materials should not be overlapped, as holes ~~per cm~~may become blocked.[2]~~) may also be considered acceptable. Perforated packaging materials should not be overlapped, as holes may become blocked.~~	
831	113	Fumigant-impenetrable packing material or coatings should be removed or punctured to ensure adequate access for the fumigant. As a guide for most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains not less than four perforations of 6 mm diameter per 100 cm^2 (10 cm × 10 cm square) or not less than five perforations of 5 mm diameter per 100 cm^2. Plastic wraps containing numerous pinholes (at least six holes per cm^2) may also be considered acceptable. Perforated packaging materials should not be overlapped, as holes may become blocked.	**India** Commodities meant to be packed in consumer packets of plastic any such material which does not allow fumigant to penetrate, shall be fumigated prior to packing. *Category : SUBSTANTIVE*
832	113	Fumigant-impenetrable packing material or coatings should be removed or punctured to ensure adequate access for the fumigant. As a guide for most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains not less than four perforations of 6 mm diameter per 100 cm^2 (10 cm × 10 cm square) or not less than five perforations of 5 mm diameter per 100 cm^2. Plastic wraps containing numerous pinholes (at least six holes per cm^2) may also be considered acceptable. Perforated packaging materials should not be overlapped, as holes may become blocked.	**United States of America** First sentence: Making holes in material is only for emergencies and not recommended to be a standard practice. The openings in packaging material is done before use. Second and third sentences: Requirements are set by the NPPO. This appears to be a requirement and there are no other alternatives provided. At a minimum suggest deleting the numbers, or suggest stating, for example. But, we do not recommend adding examples in a standard. *Category : TECHNICAL*
833	113	Fumigant-impenetrable ~~packing material~~ packaging or coatings should be removed or punctured to ensure adequate access for the fumigant. As a guide for most fumigants, otherwise impenetrable packaging can be rendered suitable for fumigation if it contains not less than four perforations of 6 mm diameter per 100 cm^2 (10 cm × 10 cm square) or not less than five perforations of 5 mm	**Uruguay** For consistency. See also comment in paragraph 109 *Category : TECHNICAL*

#	Para	Text	Comment
		diameter per 100 cm². Plastic wraps containing numerous pinholes (at least six holes per cm²) may also be considered acceptable. Perforated packaging materials should not be overlapped, as holes may become blocked.	
834	113	El material de embalaje o los recubrimientos que sean ~~impenetrables por el fumigante deberían retirarse o perforarse para garantizar un acceso suficiente del fumigante~~impenetrables no podrán ser fumigados. ~~A título orientativo para la mayoría de los fumigantes, un embalaje~~ La medida podrá aplicarse a menos que ~~de otro modo sería impenetrable puede adecuarse para la fumigación si presenta~~ se retiren o cumplan con las siguientes especificaciones: presentar no menos de cuatro perforaciones de 6 mm de diámetro por cada 100 cm² (cuadrado de 10 cm × 10 cm) o no menos de cinco perforaciones de 5 mm de diámetro por cada 100 cm². También podrán considerarse aceptables las envolturas plásticas que contienen numerosos orificios (al menos seis orificios por cm²). Los materiales de embalaje perforados no deberían ~~solaparse~~traslparse, ya que los agujeros podrían bloquearse.	**Panama** De esta forma la medida no recae la acción en la ONPF, sino es una condición que facilita la aplicación de una medida *Category : TECHNICAL*
835	113	El material de embalaje o los recubrimientos que sean impenetrables ~~por el fumigante deberían retirarse o perforarse para garantizar un acceso suficiente del fumigante~~no podran ser fumigados. ~~A título orientativo para~~ la ~~mayoría de los fumigantes, un embalaje~~ medida podrá aplicarse a menos que ~~de otro modo sería impenetrable puede adecuarse para la fumigación si presenta~~ se retiren o cumplan con las siguientes especificaciones: presentar no menos de cuatro perforaciones de 6 mm de diámetro por cada 100 cm² (cuadrado de 10 cm × 10 cm) o no menos de cinco perforaciones de 5 mm de diámetro por cada 100 cm². También podrán considerarse aceptables las envolturas plásticas que contienen numerosos orificios (al menos seis orificios por cm²). Los materiales de embalaje perforados no deberían ~~solaparse~~traslaparse, ya que los agujeros podrían bloquearse.	**OIRSA** De esta forma la medida no recae la acción en la ONPF, sino es una condición que facilita la aplicación de una medida *Category : TECHNICAL*

#	Para	Text	Comment
836	114	~~6~~7.3 **Sorción**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
837	114	~~6~~7.3 **Sorción**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
838	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the plant pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**IPPC Regional Workshop Asia** To provide examples of sorptive materials. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Thailand** Thailand agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : SUBSTANTIVE*
839	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the ~~plant~~ pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging ~~known or believed to be~~ highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**Peru** The term "plant" before "pest" deleted for consistency. Text modified to clarify guidance provided for highly sorptive commodities or packaging *Category : TECHNICAL*
840	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the ~~plant~~ pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging ~~known or believed to be~~ highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**Brazil** The term "plant" before "pest" deleted for consistency. Text modified to clarify guidance provided for highly sorptive commodities or packaging *Category : TECHNICAL*
841	115	Sorption is the process of chemically or physically binding	**Ozone Secretariat** Move to another location: 6.7

#	Para	Text	Comment
		free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the plant pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	This is an explanation and not a procedure and contradicts the requirement to monitor. Reword and put into 6.7 *Category : SUBSTANTIVE*
842	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the ~~plant~~ pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**Ozone Secretariat** Just "pest" is used in other paragraphs *Category : EDITORIAL*
843	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the ~~plant~~ pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging ~~known or believed to be~~ highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**Argentina** The term "plant" before "pest" deleted for consistency. Text modified to clarify guidance provided for highly sorptive commodities or packaging *Category : TECHNICAL*
844	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption may makes the fumigant unavailable to kill the plant pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum	**Japan** Sorption does not necessarily make the fumigants unavailable to kill the pests. *Category : TECHNICAL*

#	Para	Text	Comment
		concentration is achieved.	
845	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the ~~plant~~ pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for ~~aeration~~fumigant exposure. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**European Union** 'Plant' pest is redundant. 'Aeration' is unclear, - probably fumigant exposure is the intended meaning ? *Category : TECHNICAL*
846	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the ~~plant~~ pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for ~~aeration~~fumigant exposure. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**EPPO** 'Plant' pest is redundant. 'Aeration' is unclear, - probably fumigant exposure is the intended meaning ? *Category : TECHNICAL*
847	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the plant pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**IPPC Regional Workshop Near East** A list of highly sorptive commodities and packaging materials can be identified to avoid the use of unneeded doses of fumigation. **Libya** agree *Category : SUBSTANTIVE*
848	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the plant pest. The sorption rate is high at	**United States of America** Last sentence: may need to add gas due to sorption. *Category : TECHNICAL*

#	Para	Text	Comment
		the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	
849	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the plant pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**New Zealand** This an explanation not a procedure adn contradicts the requirement to monitor. Reword and put in section 6.7 *Category : TECHNICAL*
850	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the ~~plant~~ pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging ~~known or believed to be~~ highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**Uruguay** The term "plant" before "pest" deleted for consistency. Text modified to clarify guidance provided for highly sorptive commodities or packaging *Category : TECHNICAL*
851	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the plant pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**Australia** Move to Section 3, in between paragraph 63 and 64 - This is an explanation and not a procedure and contradicts the requirement to monitor. *Category : SUBSTANTIVE*
852	115	Sorption is the process of chemically or physically binding	**Australia** Sorption may gradually reduces to a slow rate, but more correctly, sorption gradually

#	Para	Text	Comment
		free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the plant pest. The sorption rate is high at the start of the fumigation, then gradually reduces ~~to a slow rate~~as fumigation progresses. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	reduces as fumigation continues. *Category : TECHNICAL*
853	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the plant pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**Philippines** provide examples of sorptive materials. *Category : SUBSTANTIVE*
854	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the plant pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging ~~known or believed to be~~ highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum concentration is achieved.	**COSAVE** To simplify text and clarify guidances provided for highly sorptive commodities or packaging. *Category : TECHNICAL*
855	115	Sorption is the process of chemically or physically binding free fumigant on or within the fumigated commodity, packaging or enclosure. Sorption makes the fumigant unavailable to kill the ~~plant~~ pest. The sorption rate is high at the start of the fumigation, then gradually reduces to a slow rate. Sorption increases the time required for aeration. Commodities or packaging known or believed to be highly sorptive should not be fumigated unless concentration readings can be taken to ensure that the required minimum	**COSAVE** For consistency *Category : TECHNICAL*

#	Para	Text	Comment
		concentration is achieved.	
856	115	La sorción es la unión química o física del fumigante libre a la superficie o el interior del producto, el embalaje o el recinto fumigados. La sorción del fumigante impide su disponibilidad para matar la plaga de las plantas. La velocidad de sorción es alta al inicio de la fumigación y se reduce gradualmente hasta alcanzar un valor bajo. La sorción aumenta el tiempo necesario para la aeración. Los productos o el embalaje que tengan o se crea que tienen gran capacidad de sorción no deberían fumigarse excepto si la concentración del fumigante puede medirse para garantizar que se alcanza la concentración mínima necesaria.	**Panama** Se solicita al coordinador de la norma brindar ejemplos claros de productos que puedan sufrir "Sorción". *Category : SUBSTANTIVE*
857	115	La sorción es la unión química o física del fumigante libre a la superficie o el interior del producto, el embalaje o el recinto fumigados. La sorción del fumigante impide su disponibilidad para matar la plaga de las plantas. La velocidad de sorción es alta al inicio de la fumigación y se reduce gradualmente hasta alcanzar un valor bajo. La sorción aumenta el tiempo necesario para la aeración. Los productos o el embalaje que tengan o se crea que tienen gran capacidad de sorción no deberían fumigarse excepto si la concentración del fumigante puede medirse para garantizar que se alcanza la concentración mínima necesaria.	**OIRSA** Se solicita al coordinador de la norma brindar ejemplos claros de productos que puedan sufrir "Sorción". *Category : SUBSTANTIVE*
858	116	**~~7~~6.4 Determinación de la temperatura de fumigación**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
859	116	**~~6~~7.4 Determinación de la temperatura de fumigación**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
860	117	Temperature is a factor in achieving the efficacy of fumigation. In addition to other factors, the ~~effectiveness~~ efficacy of a fumigant depends on the respiration rate of the target ~~organism~~pest. In general, the lower the temperature, the lower the respiration rate of the ~~organism~~ pest and the greater the dose of fumigant needed to achieve the required efficacy.	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : TECHNICAL*
861	117	Temperature is a factor in achieving the efficacy of fumigation. In addition to other factors, the ~~effectiveness~~ efficacy of a fumigant depends on the respiration rate of the target ~~organism~~pest. In general, the lower the temperature, the lower the respiration rate of the ~~organism~~ pest and the	**IPPC Regional Workshop Latin America** For consistency *Category : TECHNICAL*

#	Para	Text	Comment
		greater the dose of fumigant needed to achieve the required efficacy.	
862	117	Temperature is a factor in achieving the efficacy of fumigation. In addition to other factors, the ~~effectiveness~~ efficacy of a fumigant depends on the respiration rate of the target ~~organism~~pests. In general, the lower the temperature, the lower the respiration rate of the ~~organism~~ pest and the greater the dose of fumigant needed to achieve the required efficacy.	**Peru** For consistency *Category : TECHNICAL*
863	117	Temperature is a factor in achieving the efficacy of fumigation. In addition to other factors, the ~~effectiveness~~ efficacy of a fumigant depends on the respiration rate of the target ~~organism~~pest. In general, the lower the temperature, the lower the respiration rate of the ~~organism~~ pest and the greater the dose of fumigant needed to achieve the required efficacy.	**Brazil** For consistency *Category : TECHNICAL*
864	117	Temperature is a factor in achieving the efficacy of fumigation. In addition to other factors, the ~~effectiveness~~ efficacy of a fumigant depends on the respiration rate of the target ~~organism~~pest. In general, the lower the temperature, the lower the respiration rate of the ~~organism~~ pest and the greater the dose of fumigant needed to achieve the required efficacy.	**Argentina** For consistency *Category : TECHNICAL*
865	117	Temperature is a factor in achieving the efficacy of fumigation. In addition to other factors, the ~~effectiveness~~ efficacy of a fumigant depends on the respiration rate of the target ~~organism~~pest. In general, the lower the temperature, the lower the respiration rate of the ~~organism~~ pest and the greater the dose of fumigant needed to achieve the required efficacy.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 0:26 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
866	117	Temperature is a factor in achieving the efficacy of fumigation. In addition to other factors, the effectiveness of a fumigant depends on the respiration rate of the target organism. In general, the lower the temperature, the lower the respiration rate of the organism and the greater the dose of fumigant needed to achieve the required efficacy. It is the minimum temperature that the fumigation enclosure	**India** *Category : TECHNICAL*

#	Para	Text	Comment
		experiences during the process of fumigation determines the dosage of fumigant to be applied. Therefore, forecast of temperature for the entire fumigation duration should be considered in determining the dosage.	
867	117	Temperature is a factor in achieving the efficacy of fumigation. In addition to other factors, the ~~effectiveness~~ efficacy of a fumigant depends on the respiration rate of the target ~~organism~~pest. In general, the lower the temperature, the lower the respiration rate of the ~~organism~~ pest and the greater the dose of fumigant needed to achieve the required efficacy.	**Uruguay** For consistency *Category : TECHNICAL*
868	117	Temperature is a factor in achieving the efficacy of fumigation. In addition to other factors, the effectiveness of a fumigant depends on the respiration rate of the target organism. In general, the lower the temperature, the lower the respiration rate of the organism and the greater the dose of fumigant needed to achieve the required efficacy.	**PPPO** recognise recording scale to be included in this section and also other standards in the region (AFAS) if can be referenced and mentioned in this standard. *Category : SUBSTANTIVE*
869	117	Temperature is a factor in achieving the efficacy of fumigation. In addition to other factors, the ~~effectiveness~~ efficacy of a fumigant depends on the respiration rate of the target ~~organism~~pest. In general, the lower the temperature, the lower the respiration rate of the ~~organism~~ pest and the greater the dose of fumigant needed to achieve the required efficacy.	**COSAVE** For consistency *Category : TECHNICAL*
870	117	La temperatura es un factor determinante para la eficacia de la fumigación. Uno de los factores que influyen en la eficacia de un fumigante es el ritmo respiratorio del organismo objetivo. Por lo general, cuanto más baja sea la temperatura menor será el ritmo respiratorio ~~del organismo~~ de la plaga y mayor la dosis de fumigante necesaria para alcanzar el nivel de eficacia requerido.	**Colombia** Precisión en el texto. *Category : TECHNICAL*
871	117	La temperatura dentro del recinto es un factor determinante para la eficacia de la fumigación. ~~Uno de los factores que influyen en la eficacia de un fumigante es el ritmo respiratorio del organismo objetivo. Por lo general, cuanto~~ Cuanto más baja sea la temperatura menor será el ritmo respiratorio del organismo y mayor la dosis de fumigante	**Panama** Se elimina el texto, debido a que redunda dentro del mismo, porque lo que se tiene que determinar, es la temperatura del recinto. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		necesaria para alcanzar el nivel de eficacia requerido.	
872	117	La temperatura dentro del recinto es un factor determinante para la eficacia de la fumigación. ~~Uno de los factores que influyen en la eficacia de un fumigante es el ritmo respiratorio del organismo objetivo. Por lo general,~~ cuanto más baja sea la temperatura menor será el ritmo respiratorio del organismo y mayor la dosis de fumigante necesaria para alcanzar el nivel de eficacia requerido.	**OIRSA** Se elimina el texto, debido a que redunda dentro del mismo, porque lo que se tiene que determinar, es la temperatura del recinto. *Category : SUBSTANTIVE*
873	118	The temperatures of the commodity and the atmosphere within the fumigation enclosure should be measured and recorded. The lowest temperature recorded in the enclosure or the commodity is deemed to be the temperature at which the fumigation is undertaken. Fumigation should not proceed if, before or during fumigation, the temperature within the enclosure or the commodity falls to within 3–5 °C of the fumigant boiling point at the atmospheric pressure used. Under such conditions, heating equipment should be used to ensure adequate fumigant activity. Appendix ~~2~~ 1 provides boiling point temperatures for some common fumigants.	**Peru** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*
874	118	The temperatures of the commodity and the atmosphere within the fumigation enclosure should be measured and recorded. The lowest temperature recorded in the enclosure or the commodity is deemed to be the temperature at which the fumigation is undertaken. Fumigation should not proceed if, before or during fumigation, the temperature within the enclosure or the commodity falls to within 3–5 °C of the fumigant boiling point at the atmospheric pressure used. Under such conditions, heating equipment should be used to ensure adequate fumigant activity. Appendix ~~2~~ 1 provides boiling point temperatures for some common fumigants.	**Brazil** Consequential change according the proposal to delete Appendix 1. *Category : EDITORIAL*
875	118	The temperatures of the commodity and the atmosphere within the fumigation enclosure should be measured and recorded. The lowest temperature recorded in the enclosure or the commodity is deemed to be the temperature at which the fumigation is undertaken. Fumigation should not	**Argentina** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*

#	Para	Text	Comment
		proceed if, before or during fumigation, the temperature within the enclosure or the commodity falls to within 3–5 °C of the fumigant boiling point at the atmospheric pressure used. Under such conditions, heating equipment should be used to ensure adequate fumigant activity. Appendix ~~2~~ 1 provides boiling point temperatures for some common fumigants.	
876	118	The temperatures of the commodity and the atmosphere within the fumigation enclosure should be measured and recorded. The lowest temperature recorded in the enclosure or the commodity is deemed to be the temperature at which the fumigation is undertaken. ~~Fumigation should not proceed if, before or during fumigation, the temperature within the enclosure or the commodity falls to within 3 - 5 °C of the fumigant boiling point at the atmospheric pressure used. Under such conditions, heating equipment should be used to ensure adequate fumigant activity. Appendix 2 provides boiling point temperatures for some common fumigants.~~	**United States of America** Note that each NPPO has its own requirements. Suggest deletion. *Category : TECHNICAL*
877	118	The temperatures of the commodity and the atmosphere within the fumigation enclosure should be measured and recorded. The lowest temperature recorded in the enclosure or the commodity is deemed to be the temperature at which the fumigation is undertaken. Fumigation should not proceed if, before or during fumigation, the temperature within the enclosure or the commodity falls to within 3–5 °C of the fumigant boiling point at the atmospheric pressure used. Under such conditions, heating equipment should be used to ensure adequate fumigant activity. Appendix ~~2~~ 1 provides boiling point temperatures for some common fumigants.	**Uruguay** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*
878	118	The temperatures of the commodity and the atmosphere within the fumigation enclosure and the ambient air, should be measured and recorded. The lowest temperature recorded in the enclosure or the commodity is deemed to be the temperature at which the fumigation is undertaken. Fumigation should not proceed if, before or during fumigation, the temperature within the enclosure or the	**Australia** The term 'ambient air' needs to be included in this description as it is likely that the vaporaiser (if using methyl bromide on a cold day) may be located outside the fumigation facility and this temperature is likely to be different to the commodty and fumigation facility temperatures. *Category : TECHNICAL*

#	Para	Text	Comment
		commodity falls to within 3–5 °C of the fumigant boiling point at the atmospheric pressure used. Under such conditions, heating equipment should be used to ensure adequate fumigant activity. Appendix 2 provides boiling point temperatures for some common fumigants.	
879	118	The temperatures of the commodity and the atmosphere within the fumigation enclosure should be ~~measured and recorded~~measured. The lowest temperature ~~recorded~~ measured in the enclosure or the commodity is deemed to be the temperature at which the fumigation is undertaken. Fumigation ~~should not~~ could proceed ~~if,~~ with heating eqipment to ensure adequate fumigation activity before ~~or during~~ fumigation, if the temperature within the enclosure or the commodity falls to ~~within 3–5 °C of the fumigant~~ under boiling point of the used fumigation at the atmospheric pressure used. Under such conditions, heating equipment should be used to ensure adequate fumigant activity. Appendix 2 provides boiling point temperatures for some common fumigants.	**Korea, Republic of** There is no need recording during fumigation. *Category : TECHNICAL*
880	118	The temperatures of the commodity and the atmosphere within the fumigation enclosure should be measured and recorded. The lowest temperature recorded in the enclosure or the commodity is deemed to be the temperature at which the fumigation is undertaken. Fumigation should not proceed if, before or during fumigation, the temperature within the enclosure or the commodity falls to within 3–5 °C of the fumigant boiling point at the atmospheric pressure used. Under such conditions, heating equipment should be used to ensure adequate fumigant activity. Appendix ~~2~~ 1 provides boiling point temperatures for some common fumigants.	**COSAVE** Consequencial change according the proposal to delete Appendix 1 *Category : EDITORIAL*
881	118	Deberían medirse y registrarse las temperaturas del producto y de la atmósfera del interior del recinto de fumigación. ~~Se considera como~~ La temperatura a considerar en la ~~que se realiza la~~ fumigación debe ser la ~~temperatura~~ más baja registrada en el ~~recinto~~ producto o en el ~~producto. Si antes de~~ recinto. la fumigación, ~~o durante el proceso,~~ no debe procedir si la temperatura dentro del recinto o del	**Panama** Los fumigantes a diferentes condiciones pueden tener diferentes temperaturas de ebullición, varias referencias indican que la temperatura mínima para realizar una fumigación es de 10oC. *Category : TECHNICAL*

#	Para	Text	Comment
		producto desciende ~~hasta un valor de 3~~ a ~~5 °C mayor que la temperatura~~ valores menores de ~~ebullición del fumigante a la presión atmosférica utilizada, no se debería proceder con la fumigación~~10 °C. En tales condiciones, debería utilizarse un equipo calefactor para garantizar ~~una actividad fumigante suficiente. En el Apéndice 2 se indican las temperaturas de ebullición de algunos fumigantes de uso habitual~~la efectividad del fumigante.	
882	118	Deberían medirse y registrarse las temperaturas del producto y de la atmósfera del interior del recinto de fumigación. ~~Se considera como~~ La temperatura a considerar en la ~~que se realiza la~~ fumigación debe ser la ~~temperatura más~~ mas baja registrada en el ~~recinto~~ producto o en el ~~producto. Si antes de la fumigación~~recinto, ~~o durante el proceso,~~ la fumigación no debe de proceder si la temperatura dentro del recinto o del producto desciende ~~hasta un valor de 3~~ a ~~5 °C mayor que la temperatura~~ valores de ~~ebullición del fumigante a la presión atmosférica utilizada, no se debería proceder con la fumigación~~10°C. En tales condiciones, debería utilizarse un equipo calefactor para garantizar ~~una actividad fumigante suficiente. En el Apéndice 2 se indican las temperaturas de ebullición de algunos fumigantes de uso habitual~~la efectividad del fumigante.	**OIRSA** Los fumigantes a diferentes condiciones pueden tener diferentes temperaturas de ebullición, varias referencias indican que la temperatura mínima para realizar una fumigación es de 10°C. *Category : TECHNICAL*
883	119	The number of temperature sensors required to adequately measure the temperature throughout the enclosure will depend on the commodity, packaging, size and nature of the enclosure. The following table can be used as a guide for determining the number of sensors required under tent enclosures. Purpose-built and insulated fumigation chambers may require fewer sensors.	**Ozone Secretariat** There is a big difference between fumigating apples versus logs as to possible variation in temperature and complexity. There is a real danger that the "guide" is used as must or should. A 1000m3 log fumigation does not need 9 thermometers. Generaly fumigation needs less thermometers than heat treatment. *Category : TECHNICAL*
884	119	The number of temperature sensors required to adequately measure the temperature throughout the enclosure will depend on the size and nature of the ~~enclosure~~enclosure (appendix xx). The following table can be used as a guide for determining the number of sensors required under tent enclosures. Purpose-built and insulated fumigation chambers may require fewer sensors.	**Ozone Secretariat** Background data of the figures are not cited to examine these figures are appropriate. The figures in the table should be examples. Created a new appendix and move the table to the appendix for example. *Category : SUBSTANTIVE*

#	Para	Text	Comment
885	119	The number of temperature sensors required to adequately measure the temperature throughout the enclosure will depend on the size and nature of the enclosure. ~~The following table~~ Table 1 can be used as a guide for determining the number of sensors required under tent enclosures. Purpose-built and insulated fumigation chambers may require fewer sensors. Table 1: Number of sensors required according to tent enclosure size	**European Union** Tables should be numbered and should have a title. *Category : EDITORIAL*
886	119	The number of temperature sensors required to adequately measure the temperature throughout the enclosure will depend on the size and nature of the enclosure. ~~The following table~~ Table 1 can be used as a guide for determining the number of sensors required under tent enclosures. Purpose-built and insulated fumigation chambers may require fewer sensors. Table 1: Number of sensors required according to tent enclosure size	**EPPO** Tables should be numbered and should have a title. *Category : EDITORIAL*
887	119	~~The number of temperature sensors required to adequately measure the temperature throughout the enclosure will depend on the size and nature of the enclosure. The following table can be used as a guide for determining the number of sensors required under tent enclosures. Purpose-built and insulated fumigation chambers may require fewer sensors.~~	**United States of America** Each country has its own requirements *Category : TECHNICAL*
888	119	The number of temperature sensors required to adequately measure the temperature throughout the enclosure will depend on ~~the~~ the commodity, packaging, size and nature of the enclosure. The following table can be used as a guide for determining the number of sensors required under tent enclosures. Purpose-built and insulated fumigation chambers may require fewer sensors.	**New Zealand** There is a big difference between fumigating apples versus logs as to possible variation in temperature and complexity. There is a real danger that the "guide" is used as must or should. A 1000m3 log fumigation does not need 9 thermometers. Generaly fumigation needs less thermometers than heat treatment *Category : TECHNICAL*
889	119	The number of temperature sensors required to adequately	**Australia** The table, as a guide, adds nothing of value to the document.

#	Para	Text	Comment
		measure the temperature throughout the enclosure will depend on the size and nature of the enclosure. ~~The following table can be used as a guide for determining the number of sensors required under tent enclosures. Purpose-built and insulated fumigation chambers may require fewer sensors.~~	*Category : SUBSTANTIVE*
890	119	The number of temperature sensors required to adequately measure the temperature throughout the enclosure will depend on the commodity, packaging, size and nature of the enclosure. The following table can be used as a guide for determining the number of sensors required under tent enclosures. Purpose-built and insulated fumigation chambers may require fewer sensors.	**Australia** There is a big difference between fumigating apples versus logs as to possible variation in temperature and complexity. There is a real danger that the "guide" is used as must or should. A 1000m3 log fumigation does not need 9 thermometers. Generally fumigation needs less thermometers than heat treatment. *Category : TECHNICAL*
891	119	The number of temperature sensors required to adequately measure the temperature throughout the enclosure will depend on the ~~size~~ volume and nature of the enclosure. The following table can be used as a guide for determining the number of sensors required under tent enclosures. Purpose-built and insulated fumigation chambers may require fewer sensors.	**Thailand** Both term, size and volume, are used in this standard. However, it should be used in consistent with the term "volume" appeared in the formula in section 6.6. *Category : SUBSTANTIVE*
892	119	El número de sensores de temperatura necesarios para medir adecuadamente la temperatura en todo el recinto dependerá del tamaño y la naturaleza del recinto. El siguiente cuadro se puede utilizar como guía para determinar el número de sensores necesarios cuando el recinto sea una carpa. En el caso de las cámaras diseñadas ~~ex profeso~~ para la fumigación y aisladas podrán necesitarse menos sensores.	**Panama** Mejor redacción del texto *Category : EDITORIAL*
893	119	El número de sensores de temperatura necesarios para medir adecuadamente la temperatura en todo el recinto dependerá del tamaño y la naturaleza del recinto. El siguiente cuadro se puede utilizar como guía para determinar el número de sensores necesarios cuando el recinto sea una carpa. En el caso de las cámaras diseñadas ~~ex profeso~~ específicamente para la fumigación y aisladas podrán necesitarse menos sensores.	**Colombia** Mejor redacción y claridad en el texto. *Category : EDITORIAL*
894	119	El número de sensores de temperatura necesarios para	**Cuba** Evitar repetición en la misma oración

#	Para	Text	Comment
		medir adecuadamente la temperatura en todo el recinto dependerá del tamaño y la naturaleza del ~~recinto~~mismo. El siguiente cuadro se puede utilizar como guía para determinar el número de sensores necesarios cuando el recinto sea una carpa. En el caso de las cámaras diseñadas ex profeso para la fumigación y aisladas podrán necesitarse menos sensores.	*Category : EDITORIAL*
895	119	El número de sensores de temperatura necesarios para medir adecuadamente la temperatura en todo el recinto dependerá del tamaño y la naturaleza del recinto. El siguiente cuadro se puede utilizar como guía para determinar el número de sensores necesarios cuando el recinto sea una carpa. En el caso de las cámaras diseñadas ~~ex profeso~~ para la fumigación y aisladas podrán necesitarse menos sensores.	**OIRSA** Mejor redacción del texto *Category : EDITORIAL*
896	120		**IPPC Regional Workshop Asia** Refer to general regional comment on figures cited - technical justifications. To include examples of portable temperature sensors that could be used. **APPPC** agreed by APPPC **Japan** Japan support regional comment. **Viet Nam** Vietnam agreed with this APPPC comment. *Category : TECHNICAL*
897	120	tent	**European Union** More precise (see paragraph 119). *Category : EDITORIAL*
898	120	tent	**EPPO** More precise (see paragraph 119). *Category : EDITORIAL*
899	120		**Japan** See Japan's general comment. *Category : SUBSTANTIVE*
900	120		**United States of America** Each country has its own requirements. Suggest to delete this table. *Category : TECHNICAL*
901	120		**Australia** Remove table - The table, as a guide, adds nothing of value to the document. *Category : SUBSTANTIVE*
902	120		**Philippines** what type of sensors? *Category : SUBSTANTIVE*

#	Para	Text	Comment
903	120	**Tamaño del recinto (m3)**	**Panama** Se solicita al coordinador de la presente norma, brindar las referencias de los parámetros presentados en la Tabla. *Category : TECHNICAL*
904	120	**Tamaño del recinto (m3)**	**OIRSA** Se solicita al coordinador de la presente norma, brindar las referencias de los parámetros presentados en la Tabla. *Category : TECHNICAL*
905	121	**Number of sensors**	**United States of America** Each country has its own requirements. Suggest to delete this table. *Category : TECHNICAL*
906	130	**6.5 Gas tightness test**	**Canada** Perhaps link with High pressure decay time mentioned in 5.1.1. Are these two connected? *Category : TECHNICAL*
907	130	**6.5 Gas tightness test**	**Peru** "Tightness" should be translated into Spanish as "hermeticidad". See comment in paragraph 85 *Category : TRANSLATION*
908	130	**6.5 Gas tightness test**	**Argentina** "Tightness" should be translated into Spanish as "hermeticidad". See comment in paragraph 85 *Category : TRANSLATION*
909	130	**6.5 Gas tightness test**	**Uruguay** "Tightness" should be translated into Spanish as "hermeticidad". See comment in paragraph 85 *Category : TRANSLATION*
910	130	**6.5 Gas tightness test**	**COSAVE** "tightness", see comments para. 85 *Category : TRANSLATION*
911	130	**~~6~~7.5 Prueba de ~~estanqueidad~~ hermeticidad a los gases**	**Panama** Aclara mejor el uso del término y brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
912	130	**6.5 Prueba de ~~estanqueidad~~ hermeticidad a los gases**	**Cuba** *Category : TRANSLATION*
913	130	**~~6~~7.5 Prueba de ~~estanqueidad~~ hermeticidad a los gases**	**OIRSA** Aclara mejor el uso del término y brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
914	131	Prior to the fumigation (preferably immediately before), a gas tightness test should be performed. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months.	**IPPC Regional Workshop Asia** (1)To include "It is not possible to measure gas tightness for fumigation facilities/structures" after the last sentence. (2) To move paragraph 85 to this paragraph to provide details of the gas tightness test. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC

#	Para	Text	Comment
			Thailand Thailand agree with APPPC comment. **Bangladesh** Bangladesh agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : TECHNICAL*
915	131	Prior to the fumigation (preferably immediately before), a gas tightness test should be performed. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months, or after a number of treatments as specified by the NPPO.	**COSAVE** Enclosure structure may be affected by treatments, therefore testing may relay on the number of applications rather than a period of time. *Category : TECHNICAL*
916	131	Prior to the fumigation (preferably immediately before), a gas tightness test should be performed. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months, or after a number of treatments as specified by the NPPO.	**Peru** Enclosure structure may be affected by treatments, therefore testing may relay on the number of applications rather than a period of time *Category : TECHNICAL*
917	131	Prior to the fumigation (preferably immediately before), a gas tightness test should be performed. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months, or after a number of treatments as specified by the NPPO.	**Brazil** Enclosure structure may be affected by treatments, therefore testing may relay on the number of applications rather than a period of time. *Category : TECHNICAL*
918	131	Prior to the fumigation (preferably immediately before), a gas tightness test should be performed. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months.	**Ozone Secretariat** Edit: "Once the gas has been introduced a monitoring device should be used to check for any leaks and if found, repaired". Leaks need to be found before readings occur and for safety reasons. *Category : TECHNICAL*
919	131	Prior to the fumigation (preferably immediately before), a gas tightness test should be performed. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months, or after a number of treatments as specified by the NPPO.	**Argentina** Enclosure structure may be affected by treatments, therefore testing may relay on the number of applications rather than a period of time *Category : TECHNICAL*
920	131	Prior to the fumigation (preferably immediately before), a	**United States of America** Cannot be used on vessels, rail cars or tarpaulins. Remove last sentence including 6 to 12

#	Para	Text	Comment
		gas tightness test should be performed. ~~However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months.~~	months. *Category : TECHNICAL*
921	131	Prior to the fumigation (preferably immediately before), a gas tightness test should be performed. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months, or after a number of treatments as specified by the NPPO.	**Uruguay** Enclosure structure may be affected by treatments, therefore testing may relay on the number of applications rather than a period of time *Category : TECHNICAL*
922	131	Prior to the fumigation (preferably immediately before), a gas tightness test should be performed. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months. Where the gas tightness of an enclosure may not be sufficient to ensure adequate gas concentrations are maintained throughout the fumigation period, the gas tightness should be determined by measuring the half pressure decreasing time. The required gas tightness of an enclosure will depend on the fumigant being used and the environment surrounding the fumigation enclosure (e.g. proximity of sensitive equipment, commodities or people). For example, an enclosure having a half pressure decreasing time of ten seconds or more (air pressure decreasing from 200 Pa to 100 Pa) may be considered suitably gas tight for methyl bromide fumigations.	**Korea, Republic of** Propose move the whole sentence from 5.1.1 Pressure testing the enclosure in para 85 to 6.5 Gas tightness test. *Category : EDITORIAL*
923	131	Prior to the fumigation (preferably immediately before), a gas tightness test should be performed. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months. Once the gas has been introduced a monitoring device should be used to check for any leaks and if found, repaired.	**Australia** Leaks need to be found before readings occur and for safety reasons. *Category : TECHNICAL*
924	131	Prior to the fumigation (preferably immediately before), a	**Australia** Pressure testing is not practical on sheeted enclosures or ships holds etc

#	Para	Text	Comment
		gas tightness test should be ~~performed~~performed where enclosures allow for this. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months.	*Category : TECHNICAL*
925	131	Prior to the fumigation (preferably immediately before), a gas tightness test should be performed. However, if the fumigation enclosure is of sufficiently resistant construction and in regular use, the testing may only be necessary at intervals of, for example, 6 or 12 months.	**Philippines** provide procedure for gas tightness test *Category : SUBSTANTIVE*
926	131	Antes de la fumigación (de preferencia, inmediatamente antes) debería realizarse una prueba de ~~estanqueidad~~ hermeticidad a los gases. No obstante, si el recinto de fumigación es de construcción ~~suficientemente resistente~~ permanente y se utiliza regularmente, podrá ser suficiente realizar pruebas periódicas, por ejemplo, cada 6 o 12 meses.	**Panama** Aclara mejor el uso del término. *Category : EDITORIAL*
927	131	Antes de la fumigación (de preferencia, inmediatamente antes) debería realizarse una prueba de ~~estanqueidad~~ hermeticidad a los gases. No obstante, si el recinto de fumigación es de construcción ~~suficientemente resistente~~ permanente y se utiliza regularmente, podrá ser suficiente realizar pruebas periódicas, por ejemplo, cada 6 o 12 meses.	**OIRSA** Aclara mejor el uso del término. *Category : EDITORIAL*
928	132	~~**6.6 Introduction of the fumigant gas**~~	**United States of America** There are many mistakes in this section and the formula is incorrect. Suggest this be deleted. *Category : TECHNICAL*
929	132	~~7~~6.6 **Introducción del gas fumigante**	**Panama** Brindar un orden y jerarquía a cada tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
930	132	~~6~~7.6 **Introducción del gas fumigante**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
931	133	~~The minimum ambient temperature that the fumigation enclosure or commodity (whichever is less) is expected to experience over the duration of the treatment should be used when determining the dosage.~~	**United States of America** See United States comments in paragraphs 108 and 132 *Category : TECHNICAL*
932	134	The total weight of fumigant to be applied is a product of the required dosage (dose rate) and the volume of the	**European Union** More logical order of the sentences. *Category : EDITORIAL*

#	Para	Text	Comment
		enclosure. Correct measurement of the enclosure volume is therefore important. Excess sorption or leakage from the fumigation enclosure should also be taken into consideration. ~~Correct measurement of the enclosure volume is therefore important.~~	
933	134	The total weight of fumigant to be applied is a product of the required dosage (dose rate) and the volume of the enclosure. Correct measurement of the enclosure volume is therefore important. Excess sorption or leakage from the fumigation enclosure should be taken into consideration~~. Correct measurement of the enclosure volume is therefore important.~~.	**EPPO** More logical order of the sentences. *Category : EDITORIAL*
934	134	~~The total weight of fumigant to be applied is a product of the required dosage (dose rate) and the volume of the enclosure. Excess sorption or leakage from the fumigation enclosure should be taken into consideration. Correct measurement of the enclosure volume is therefore important.~~	**United States of America** See United States comments in paragraphs 108 and 132 *Category : TECHNICAL*
935	134	El peso total de fumigante que debe aplicarse es el resultado de multiplicar la dosis requerida (dosis unitaria) por el volumen del recinto. ~~Deberían tenerse en cuenta el exceso de sorción o las fugas del recinto de fumigación.~~ Por lo tanto, la medición correcta del volumen del recinto es importante.	**Panama** No es posible calcular las fugas del recinto de fumigación o el exceso de sorción, o no debería de ser parámetro de estimación *Category : TECHNICAL*
936	134	El peso total de fumigante que debe aplicarse es el resultado de multiplicar la dosis requerida (dosis unitaria) por el volumen del recinto. ~~Deberían tenerse en cuenta el exceso de sorción o las fugas del recinto de fumigación.~~ Por lo tanto, la medición correcta del volumen del recinto es importante.	**OIRSA** No es posible calcular las fugas del recinto de fumigación o el exceso de sorción, o no debería de ser parámetro de estimación. *Category : TECHNICAL*
937	135	~~Once the enclosure volume has been determined, the~~ The weight of fumigant required should be calculated as follows:	**European Union** Useless. *Category : EDITORIAL*
938	135	~~Once the enclosure volume has been determined, the~~ The weight of fumigant required should be calculated as	**EPPO** Useless. *Category : EDITORIAL*

#	Para	Text	Comment
		follows:	
939	135	~~Once the enclosure volume has been determined, the weight of fumigant required should be calculated as follows:~~	**United States of America** See United States comments in paragraphs 108 and 132 *Category : TECHNICAL*
940	135	Once the enclosure volume has been determined, the weight of fumigant required should be calculated as follows: replace with:The volume of fumigant required should be calculated as follows: Amount of fumigant (Vf) = Replace with .... formula would not copy - sent by email The volume of fumigant required should be calculated as follows: Amount of fumigant (Vf) = where the dosage takes into account fumigant loss over the duration of the treatment and the percentage fumigant purity is equal to the amount of active fumigant in the gas mixture.	**New Zealand** The current formula assumes the fumigant is a solid when added. This formula should also be included as it allows for the fumigant to be stored and added as a gas. The formula is being sent separately... *Category : TECHNICAL*
941	136	~~Amount of fumigant (g) =~~	**United States of America** See United States comments in paragraphs 108 and 132 *Category : TECHNICAL*
942	137	where the dosage should take into account fumigant loss over the duration of the treatment and the percentage fumigant release (or purity) is equal to the amount of fumigant generated from the chemical applied (e.g. aluminium phosphide generates around 33.3% of phosphine gas).	**Ozone Secretariat** Add: "Once the gas has been introduced a monitoring device should be used to check for any leaks and if found, repaired". Leaks need to be found before readings occur and for safety reasons. *Category : TECHNICAL*
943	137	where the dosage should take into account fumigant loss over the duration of the treatment and the percentage fumigant release (or purity) is equal to the amount of fumigant generated from the chemical applied (e.g. aluminium phosphide generates around 33.3% of phosphine gas).	**Ozone Secretariat** Rewording: "Where the dosage should take into account fumigant sorption, minor leaks and use the active ingredient of the chemical applied (e.g. aluminium phosphide generates around 33.3% of phosphine gas)". Application of chemical should always use the active ingredient % or weight available. Noting that there should be recognition of tracer chemicals (i.e such as chloropicrin in methyl bromide) that should be calculated for. *Category : TECHNICAL*
944	137	where the dosage should take into account fumigant loss over the duration of the treatment and the percentage fumigant ~~release~~ purity (or ~~purity)~~ release) is equal to the amount of fumigant generated from the chemical applied	**European Union** Purity is the term used in the formula. *Category : EDITORIAL*

#	Para	Text	Comment
		(e.g. aluminium phosphide generates around 33.3% of phosphine gas).	
945	137	where the dosage should take into account fumigant loss over the duration of the treatment and the percentage fumigant ~~release~~ purity (or ~~purity)~~ release) is equal to the amount of fumigant generated from the chemical applied (e.g. aluminium phosphide generates around 33.3% of phosphine gas).	**EPPO** Purity is the term used in the formula. *Category : EDITORIAL*
946	137	~~where the dosage should take into account fumigant loss over the duration of the treatment and the percentage fumigant release (or purity) is equal to the amount of fumigant generated from the chemical applied (e.g. aluminium phosphide generates around 33.3% of phosphine gas).~~	**United States of America** See United States comments in paragraphs 108 and 132 *Category : TECHNICAL*
947	137	~~where the dosage should take into account fumigant loss over the duration of the treatment and the percentage fumigant release (or purity) is equal to the amount of fumigant generated from the chemical applied (e.g. aluminium phosphide generates around 33.3% of phosphine gas).~~Where the dosage should take into account fumigant sorption, minor leaks and use the active ingredient of the chemical applied (e.g. aluminium phosphide generates around 33.3% of phosphine gas).	**Australia** Application of chemical should always use the active ingredient % or weight available. Noting that there should be recognition of tracer chemicals (i.e such as chloropicrin in methyl bromide) that should be calculated for. *Category : TECHNICAL*
948	137	where the dosage should take into account fumigant loss over the duration of the treatment and the percentage fumigant release (or purity) is equal to the amount of fumigant generated from the chemical ~~applied (e~~applied~~.g. aluminium phosphide generates around 33.3% of phosphine gas).~~	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*
949	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped compartment (see Appendix ~~3~~ 2 for examples of shapes and formulae for calculations). The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume.	**Peru** PM) Consequential change according the proposal to delete Appendix 1 *Category : TECHNICAL*
950	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped	**Brazil** Consequential change according the proposal to delete Appendix 1 *Category : TECHNICAL*

#	Para	Text	Comment
		compartment (see Appendix ~~3~~ 2 for examples of shapes and formulae for calculations). The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume.	
951	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped compartment (see Appendix 3 for examples of shapes and formulae for calculations). The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume. However, the target fumigant concentration still needs to be met. When multiple supply pipes are used and the fumigant is intended to be released simultaneously, all pipes must be equal in total length and diameter and evenly distributed through the enclosure.	**Ozone Secretariat** This could be confused with cardboard or wooden boxes which is not the intent. The gas introduction sytem needs to be balanced for a good result. *Category : TECHNICAL*
952	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped compartment (see Appendix ~~3~~ 2 for examples of shapes and formulae for calculations). The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume.	**Argentina** Consequential change according the proposal to delete Appendix 1 *Category : TECHNICAL*
953	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped compartment ~~(see Appendix 3 for examples of shapes and formulae for calculations)~~. The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume.	**European Union** In relation to the EU Appendix 3 is considered unnecessary. The information in it is available from basic geometry textbook. See also EU comment on para 366 on "Potential implementation issues" SC and TPPG should consider its inclusion in manual. *Category : SUBSTANTIVE*
954	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped ~~compartment (see Appendix 3 for examples of shapes and formulae for calculations)~~compartment. The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be	**EPPO** In relation to the EPPO region Appendix 3 is considered unnecessary. The information in it is available from basic geometry textbook. See also EPPO comment on para 366 on "Potential implementation issues" *Category : SUBSTANTIVE*

#	Para	Text	Comment
		subtracted from the enclosure volume.	
955	138	~~The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped compartment (see Appendix 3 for examples of shapes and formulae for calculations). The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume.~~	**United States of America** See United States comments in paragraphs 108 and 132 *Category : TECHNICAL*
956	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped compartment (see Appendix ~~3~~ 2 for examples of shapes and formulae for calculations). The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume.	**Uruguay** Consequential change according the proposal to delete Appendix 1 *Category : TECHNICAL*
957	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped ~~compartment (see Appendix 3 for examples of shapes and formulae for calculations). The volume of containers (e~~compartment~~.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume.~~	**Australia** It is not practical to accurately determine displaced volume. This could be practical if monitoring concentration readings are mandatory but they are not. Removing Appendix 3 because it is not required. Common practise is to calculate the volume of the container as empty. *Category : SUBSTANTIVE*
958	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped ~~compartment~~ enclosure (see Appendix 3 for examples of shapes and formulae for calculations). The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume.	**Singapore** To be consistent with reference to the enclosure instead of introducing a term - compartment here. *Category : EDITORIAL*
959	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped compartment (see Appendix 3 for examples of shapes and formulae for calculations). The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume. Indonesia would like to comment:	**Indonesia** *Category : TECHNICAL*

#	Para	Text	Comment
		that formulation mentioned above is only applies to methyl bromide, other fumigant may used another formula	
960	138	The volume of the enclosure is the internal volume and should be calculated separately for each differently shaped compartment (see Appendix ~~3~~ 2 for examples of shapes and formulae for calculations). The volume of containers (e.g. drums or boxes) within the enclosure that are airtight and non-absorbent to the fumigant can be subtracted from the enclosure volume.	**COSAVE** Consequencial change according the proposal to delete Appendix 1 *Category : EDITORIAL*
961	139	As the fumigant should be applied in a gaseous form, for some fumigants under cool conditions this can be achieved by applying the liquid fumigant through a vaporizer in order to fully volatilize the fumigant prior to its entry into the fumigation enclosure. Some fumigants such as phosphine are introduced as solids that react with moisture and oxygen to turn into a gaseous form.	**European Union** Missing information, solid fumigants excluded otherwise. *Category : TECHNICAL*
962	139	As the fumigant should be applied in a gaseous form, for some fumigants under cool conditions this can be achieved by applying the liquid fumigant through a vaporizer in order to fully volatilize the fumigant prior to its entry into the fumigation enclosure. Some fumigants such as phosphine are introduced as solids that react with moisture and oxygen to turn into a gaseous form.	**EPPO** Missing information, solid fumigants excluded otherwise. *Category : TECHNICAL*
963	139	~~As the fumigant should be applied in a gaseous form, for some fumigants under cool conditions this can be achieved by applying the liquid fumigant through a vaporizer in order to fully volatilize the fumigant prior to its entry into the fumigation enclosure.~~	**United States of America** See United States comments in paragraphs 108 and 132 *Category : TECHNICAL*
964	139	El fumigante debería aplicarse en ~~forma gaseosa~~estado de gas. En condiciones ~~frías~~frescas, para algunos fumigantes, puede ser necesario hacer pasar el producto líquido por un vaporizador para volatilizarlo completamente antes de introducirlo en el recinto de fumigación.	**Panama** Uso de términos adecuados *Category : EDITORIAL*
965	139	El fumigante debería aplicarse en ~~forma gaseosa~~estado de gas. En condiciones ~~frías~~frescas, para algunos fumigantes, puede ser necesario hacer pasar el producto líquido por un	**OIRSA** Uso de términos adecuados *Category : EDITORIAL*

#	Para	Text	Comment
		vaporizador para volatilizarlo completamente antes de introducirlo en el recinto de fumigación.	
966	140	For methyl bromide, the water in the vaporizer unit should be raised to 65 °C before any liquid methyl bromide is released into it. To ensure complete vaporization, the water should be maintained at this temperature for as long as possible throughout the gas introduction process and should not be allowed to fall below 65 °C.	**IPPC Regional Workshop Asia** To retain **APPPC** agreed by APPPC **Nepal** Support and agree with Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : EDITORIAL*
967	140	For methyl bromide, the water in the vaporizer unit should be raised to ~~65 °C~~ sufficient temperature before any liquid methyl bromide is released into it. To ensure complete vaporization, the water should be maintained at ~~this~~ approptiate temperature for as long as possible throughout the gas introduction ~~process and should not be allowed to fall below 65 °C~~process.	**Japan** See Japan's general comment. *Category : TECHNICAL*
968	140	For methyl bromide, the water in the vaporizer unit should be raised to 65 °C before any liquid methyl bromide is released into it. To ensure complete vaporization, the water should be maintained at this temperature ~~for as long as possible~~ throughout the gas introduction process and should not be allowed to fall below 65 °C.	**European Union** Contradictory with "should be maintained". *Category : TECHNICAL*
969	140	For methyl bromide, the water in the vaporizer unit should be raised to 65 °C before any liquid methyl bromide is released into it. To ensure complete vaporization, the water should be maintained at this temperature for as long as possible throughout the gas introduction process ~~and should not be allowed to fall below 65 °C~~.	**European Union** Redundant with "should be maintained at this temperature". *Category : EDITORIAL*
970	140	For methyl bromide, the water in the vaporizer unit should be raised to 65 °C before any liquid methyl bromide is released into it. To ensure complete vaporization, the water should be maintained at this temperature ~~for as long as possible~~ throughout the gas introduction ~~process and should not be allowed to fall below 65 °C~~process.	**EPPO** Redundant with "should be maintained at this temperature". Text clearer *Category : TECHNICAL*
971	140	~~For methyl bromide, the water in the vaporizer unit should be raised to 65 °C before any liquid methyl bromide is released into it. To ensure complete vaporization, the water~~	**United States of America** See United States comments in paragraphs 108 and 132 *Category : TECHNICAL*

#	Para	Text	Comment
		~~should be maintained at this temperature for as long as possible throughout the gas introduction process and should not be allowed to fall below 65 °C.~~	
972	140	~~For methyl bromide, the water in the vaporizer unit should be raised to 65 °C before any liquid methyl bromide is released into it. To ensure complete vaporization, the water should be maintained at this temperature for as long as possible throughout the gas introduction process and should not be allowed to fall below 65 °C.~~	**Australia** This is Methyl Bromide specific. There are many variations to the requirements for different fumigants. Must be all or none. *Category : SUBSTANTIVE*
973	140	For methyl bromide, the water in the vaporizer unit should be raised to 65 °C before any liquid methyl bromide is released into it. To ensure complete vaporization, the water should be maintained at this temperature for as long as possible throughout the gas introduction ~~process and should not be allowed to fall below 65 °C~~process.	**China** The meaning repeats with the first half of the sentence that "the water should be maintained at this temperature" and needs to be removed. *Category : EDITORIAL*
974	140	For methyl bromide, the water in the vaporizer unit should be raised to 65 °C before any liquid methyl bromide is released into it. To ensure complete vaporization, the water should be maintained at this temperature for as long as possible throughout the gas introduction process and should not be allowed to fall below 65 °C. Indonesia would like to add: minimum between to and 65°C and the complete sentence become: For methyl bromide, the water in the vaporizer unit should be raised to minimum 65°C before any liquid methyl bromide is released into it.	**Indonesia** *Category : TECHNICAL*
975	140	En el caso del bromuro de metilo, el agua del vaporizador debería calentarse ~~hasta~~ a una temperatura mínima de 65 °C antes de liberar el bromuro de metilo líquido en su interior. Para garantizar una vaporización completa, el agua se debería mantener a esta temperatura durante el mayor tiempo posible durante la introducción del gas y no debería permitirse que descendiera por debajo de los 65 °C.	**Panama** Correcta traducción del inglés al español *Category : TRANSLATION*
976	140	En el caso del bromuro de metilo, el agua del vaporizador debería calentarse ~~hasta~~ a una temperatura mínima de 65 °C antes de liberar el bromuro de metilo líquido en su interior. Para garantizar una vaporización completa, el agua se	**OIRSA** Correcta traducción del inglés al español. *Category : TRANSLATION*

#	Para	Text	Comment
		debería mantener a esta temperatura durante el mayor tiempo posible durante la introducción del gas y no debería permitirse que descendiera por debajo de los 65 °C.	
977	141	**~~6~~7.7 Monitoreo y registro de la fumigación**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
978	141	**~~6~~7.7 Monitoreo y registro de la fumigación**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
979	142	Fumigant concentration readings or recordings should be used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken ~~a number of times during~~ according to the ~~treatment and in a number of locations in the~~ fumigation ~~enclosure~~ protocol to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient ~~frequency~~ frequency, to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made (if required).	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : EDITORIAL*
980	142	Fumigant concentration readings or recordings should be used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken ~~a number of times during~~ according to the ~~treatment and in a number of locations in the~~ fumigation ~~enclosure~~ protocol to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient ~~frequency~~ frequency, to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made (if required).	**IPPC Regional Workshop Latin America** To simplify the text *Category : EDITORIAL*

#	Para	Text	Comment
981	142	Fumigant concentration readings or recordings should be used to indicate if the amount of fumigant ~~applied~~ is ~~correct~~ applied and ~~if any~~ no excessive leakage or sorption ~~of the~~ fumigant exists. The start and finish readings are the most important and minimum that should be taken. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken a number of times during the treatment and in a number of locations in the fumigation enclosure to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient frequency to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made (if required).	**Ozone Secretariat** More positive language. The most crucial readings to be taken. *Category : TECHNICAL*
982	142	Fumigant concentration readings or recordings should be used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken ~~a number of times during~~ according to the ~~treatment and in a number of locations in the~~ fumigation ~~enclosure~~ protocol to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient ~~frequency~~ frequency, to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made (if required).	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 0:35 Accepted from IPPC Regional Workshop LA. *Category : EDITORIAL*
983	142	Fumigant concentration readings or recordings should be used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken a number of times during the treatment and in a number of locations in the fumigation enclosure to ensure that the fumigant is evenly	**European Union** Text moved from para. 153 for better reading flow. *Category : EDITORIAL*

#	Para	Text	Comment
		distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient frequency to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made (if required). The dose achieved at the location providing the lowest cumulative CT should be used as the achieved treatment dose.	
984	142	Fumigant concentration ~~readings or~~ recordings should be used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken a number of times during the treatment and in a number of locations in the fumigation enclosure to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded ~~either continuously or~~ in sufficient frequency to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made ~~(if required)~~.	**European Union** Superfluous text deleted for simplification. *Category : EDITORIAL*
985	142	Fumigant concentration readings or recordings should be used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken a number of times during the treatment and in a number of locations in the fumigation enclosure to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient frequency to provide confidence that the required dose has been achieved and maintained ~~or~~, and to allow adequate calculations of CT to be made (if required).	**European Union** Better wording. *Category : EDITORIAL*
986	142	Fumigant concentration ~~readings or~~ recordings should be	**EPPO**

#	Para	Text	Comment
		used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken a number of times during the treatment and in a number of locations in the fumigation enclosure to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded ~~either continuously or~~ in sufficient frequency to provide confidence that the required dose has been achieved and ~~maintained or~~ maintained, and to allow adequate calculations of CT to be ~~made (if required)~~made. The dose achieved at the location providing the lowest cumulative CT should be used as the achieved treatment dose.	Better wording Superfluous text deleted for simplification Text moved from para. 153 for better reading flow. *Category : EDITORIAL*
987	142	Fumigant concentration readings or recordings should be used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken a number of times during the treatment and in a number of locations in the fumigation enclosure to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient frequency to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made (if required).	**United States of America** Third sentence: requirements are dependent upon the NPPO *Category : TECHNICAL*
988	142	Fumigant concentration readings or recordings should be used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time usually begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken a number of times during the treatment and in a number of locations in the fumigation enclosure to ensure that the fumigant is evenly distributed in the enclosure over the	**Korea, Republic of** Propose to add "usually" because Phospine can be exceptional. *Category : EDITORIAL*

#	Para	Text	Comment
		duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient frequency to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made (if required).	
989	142	Fumigant concentration readings or recordings should be used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken a number of times during the treatment and in a number of locations in the fumigation enclosure to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient frequency to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made (if required). All fumigations must be monitored. For enclosures larger than 30 cubic metres (equivalent to the average internal volume of a 20 ft shipping container), a minimum of three monitoring tubes must be positioned within the enclosure. For enclosures smaller than 30 cubic metres, a minimum of one monitoring tube must be placed at the top centre of the commodity being fumigated. For commodities not fumigated inside a container (e.g. large items of industrial and agricultural machinery, bagged grain, stacks of timber) the entire enclosed space within the fumigation sheets must be treated as a single fumigation enclosure. Monitoring tubes must be placed as far as practicable from fumigant supply pipes.	**Australia** It will be useful to provide minimum requirements for monitoring and recording. *Category : TECHNICAL*
990	142	Fumigant concentration readings or recordings should be used to ~~indicate~~ verify if the amount of fumigant applied is correct and if any excessive leakage or sorption of the	**Australia** Change the word 'indicate' to 'verify' to strengthen the requirement to take concentration readings. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken a number of times during the treatment and in a number of locations in the fumigation enclosure to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient frequency to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made (if required).	
991	142	Fumigant concentration readings or recordings should be used to indicate if the amount of fumigant applied is correct and if any excessive leakage or sorption of the fumigant exists. The fumigation time begins once all the gas has been introduced and has distributed throughout the enclosure. Concentration readings should be taken a number of times during the treatment and in a number of locations in the fumigation enclosure to ensure that the fumigant is evenly distributed in the enclosure over the duration of the treatment. Fumigant concentration should be monitored and recorded either continuously or in sufficient frequency to provide confidence that the required dose has been achieved and maintained or to allow adequate calculations of CT to be made (if required).	**Philippines** what is the basis for computing even distribution of fumigant, is it the same with equilibrium used in AFAS? *Category : TECHNICAL*
992	142	Las lecturas o los registros de la concentración de fumigante deberían utilizarse para determinar si la cantidad de fumigante aplicada es correcta y si existe alguna fuga o sorción excesiva del fumigante. El tiempo de fumigación comienza una vez que se ha introducido todo el gas y se ha distribuido por todo el recinto. Se deberían tomar lecturas de la concentración varias veces ~~durante el~~ de acuerdo al protocolo del tratamiento y en diversos lugares del recinto de fumigación para asegurarse de que el fumigante está distribuido uniformemente en el recinto durante el transcurso del tratamiento. La concentración de fumigante debería monitorearse y registrarse bien de forma continua o bien con la frecuencia suficiente para que se pueda confiar	**Colombia** Precisión en el texto *Category : TECHNICAL*

#	Para	Text	Comment
		en que se ha alcanzado y mantenido la dosis necesaria o para permitir la realización de cálculos de CT adecuados (en caso necesario).	
993	142	Las lecturas o los registros de la concentración de fumigante deberían utilizarse para determinar si la cantidad de fumigante aplicada es correcta y si existe alguna fuga o sorción ~~excesiva~~ significante que afecte la concentración del fumigante. El tiempo de fumigación comienza una vez que se ha introducido todo el gas y se ha distribuido por todo el recinto. Se deberían tomar lecturas de la concentración varias veces durante el tratamiento y en diversos lugares del recinto de fumigación para asegurarse de que el fumigante está distribuido uniformemente en el recinto durante el transcurso del tratamiento. La concentración de fumigante debería monitorearse y registrarse bien de forma continua o bien con la frecuencia suficiente para que se pueda confiar en que se ha alcanzado y mantenido la dosis necesaria o para permitir la realización de cálculos de CT adecuados (en caso necesario).	**Panama** Dentro de la norma no debería de considerarse fugas "excesivas". *Category : TECHNICAL*
994	142	Las lecturas o los registros de la concentración de fumigante deberían utilizarse para determinar si la cantidad de fumigante aplicada es correcta y si existe alguna fuga o sorción ~~excesiva~~ significante que afecte la concentración del fumigante. El tiempo de fumigación comienza una vez que se ha introducido todo el gas y se ha distribuido por todo el recinto. Se ~~deberían~~ debe tomar lecturas de la concentración varias veces ~~durante~~ segun el ~~tratamiento~~ programa de fumigación y en diversos lugares del recinto de fumigación para asegurarse de que el fumigante está distribuido uniformemente en el recinto durante el transcurso del tratamiento. La concentración de fumigante debería monitorearse y registrarse bien de forma continua o bien con la frecuencia suficiente para que se pueda confiar en que se ha alcanzado y mantenido la ~~dosis~~ concentración necesaria o para permitir la realización de cálculos de CT adecuados (en caso necesario).	**OIRSA** Dentro de la norma no debería de considerarse fugas "excesivas". *Category : TECHNICAL*
995	143	**6.7.1 Measuring fumigant concentration - Using**	**IPPC Regional Workshop Asia** To add in "using sampling lines' for clarity of associated paragraphs.

#	Para	Text	Comment
		sampling lines ~~Measuring fumigant concentration~~	**APPPC** agreed by APPPC **Thailand** Thailand agree with APPPC comment. **Bangladesh** agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : SUBSTANTIVE*
996	143	76.7.1 Medición de la concentración de fumigante	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
997	143	~~6~~7.7.1 Medición de la concentración ~~de~~ del fumigante	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
998	144	The number of sampling lines required to adequately measure the fumigant concentration throughout the enclosure will depend on the size and nature of the ~~enclosure~~enclosure (appendix xx). The following table can be used as a guide for determining the number of sampling lines required under tent enclosures. Purpose-built fumigation chambers may require fewer sampling lines.	**Ozone Secretariat** Background data of the figures are not cited to examine these figures are appropriate. The figures in the table should be examples. Created a new appendix and move the table to the appendix for example. *Category : SUBSTANTIVE*
999	144	The number of sampling lines required to adequately measure the fumigant concentration throughout the enclosure will depend on the size and nature of the enclosure. ~~The following table~~ Table 2 can be used as a guide for determining the number of sampling lines required under tent enclosures. Purpose-built fumigation chambers may require fewer sampling lines. Table 2: Number of sampling lines required according to tent enclosure size	**European Union** Tables should be numbered and should have a title. *Category : EDITORIAL*
1000	144	The number of sampling lines required to adequately measure the fumigant concentration throughout the	**EPPO** Tables should be numbered and should have a title. *Category : EDITORIAL*

#	Para	Text	Comment
		enclosure will depend on the size and nature of the enclosure. ~~The following table~~ Table 2 can be used as a guide for determining the number of sampling lines required under tent enclosures. Purpose-built fumigation chambers may require fewer sampling lines. Table 2: Number of sampling lines required according to tent enclosure size	
1001	144	The number of sampling lines required to adequately measure the fumigant concentration throughout the enclosure will depend on the size and nature of the enclosure~~. The following table can be used as a guide for determining the number of sampling lines required under tent enclosures. Purpose-built fumigation chambers may require fewer sampling lines~~.	**Japan** See Japan's general comment. *Category : SUBSTANTIVE*
1002	144	~~The number of sampling lines required to adequately measure the fumigant concentration throughout the enclosure will depend on the size and nature of the enclosure. The following table can be used as a guide for determining the number of sampling lines required under tent enclosures. Purpose-built fumigation chambers may require fewer sampling lines.~~	**United States of America** This appears as if there are no other options and is a requirement. Should be deleted. *Category : TECHNICAL*
1003	144	The number of sampling lines required to adequately measure the fumigant concentration throughout the enclosure will depend on the ~~size~~ volume and nature of the enclosure. The following table can be used as a guide for determining the number of sampling lines required under tent enclosures. Purpose-built fumigation chambers may require fewer sampling lines.	**Thailand** Both term, size and volume, are used in this standard. However, it should be used in consistent with the term "volume" appeared in the formula in section 6.6. *Category : EDITORIAL*
1004	144	El número de líneas de muestreo necesarias para medir adecuadamente la concentración ~~de~~ del fumigante en todo el recinto dependerá del tamaño y la naturaleza del recinto. El siguiente cuadro se puede utilizar como guía para determinar el número de líneas de muestreo necesarias cuando el recinto sea una carpa. Las cámaras diseñadas ~~ex profeso~~ para la fumigación podrán requerir menos líneas de	**Panama** Mejor entendimiento del texto *Category : EDITORIAL*

#	Para	Text	Comment
		~~muestreo~~monitoreo.	
1005	144	El número de líneas de muestreo necesarias para medir adecuadamente la concentración de fumigante en todo el recinto dependerá del tamaño y la naturaleza del recinto. El siguiente cuadro se puede utilizar como guía para determinar el número de líneas de muestreo necesarias cuando el recinto sea una carpa. Las cámaras diseñadas ~~ex profeso~~ específicamente para la fumigación podrán requerir menos líneas de muestreo.	**Colombia** Mejor redacción y claridad en el texto. *Category : EDITORIAL*
1006	144	El número de líneas de muestreo necesarias para medir adecuadamente la concentración ~~de~~ del fumigante en todo el recinto dependerá del tamaño y la naturaleza del recinto. El siguiente cuadro se puede utilizar como guía para determinar el número de líneas de muestreo necesarias cuando el recinto sea una carpa. Las cámaras diseñadas ~~ex profeso~~ para la fumigación podrán requerir menos líneas de ~~muestreo~~monitoreo.	**OIRSA** Mejor entendimiento del texto *Category : EDITORIAL*
1007	145	Size of **tent** enclosure (m^3)	**European Union** More precise (see paragraph 144). *Category : EDITORIAL*
1008	145	Size of tent enclosure (m^3)	**EPPO** More precise (see paragraph 144). *Category : EDITORIAL*
1009	145	Size of enclosure (m^3)	**Japan** See Japan's general comment. *Category : SUBSTANTIVE*
1010	145	Size of enclosure (m^3)	**United States of America** Delete this table. See United States comments in paragraphs 108 and 144 *Category : TECHNICAL*
1011	145	Size of enclosure (m^3)	**Australia** Addition of the following to the table: 1 line for less than 30m3 3 lines for less than 300m3 >300 to 15,000 6 sampling lines Even though it is a guide, often such requirements are taken as must haves. Six sampling lines for a 32m3 container is execessive and does not match the words in para 151 of 3 lines minimum. *Category : SUBSTANTIVE*
1012	145	Size of enclosure (m^3)	**Philippines** provide a simplified way of measuring fumigant concentration similar to that of ISPM 15.

#	Para	Text	Comment
			Since this ISPM is across all products, we suggest commodity groupings or per target pest. *Category : TECHNICAL*
1013	145	Size of enclosure (m^3)	**Philippines** to include location of sampling lines within the enclosure. *Category : TECHNICAL*
1014	145	**Tamaño del recinto (m3)**	**Panama** Se solicita al coordinador de la presente norma, brindar las referencias de los parámetros presentados en la Tabla. También se solicita el número de líneas de monitoreo para tratar contenedores o cámaras pequeñas. *Category : SUBSTANTIVE*
1015	145	**Tamaño del recinto (m3)**	**OIRSA** Se solicita al coordinador de la presente norma, brindar las referencias de los parámetros presentados en la Tabla. También se solicita el número de líneas de monitoreo para tratar contenedores o cámaras pequeñas. *Category : SUBSTANTIVE*
1016	146	~~muestreo~~monitoreo	**Panama** Monitoreo se puede llevar el control en varias etapas para constatar que se cumplió con los objetivos de la fumigación. *Category : SUBSTANTIVE*
1017	146	~~muestreo~~monitoreo	**OIRSA** Monitoreo se puede llevar el control en varias etapas para constatar que se cumplió con los objetivos de la fumigación. *Category : TECHNICAL*
1018	147	Up to 15 000	**Ozone Secretariat** 1 line for less than 30m3 3 lines for less than 300m3 >300 to 15,000 6 sampling lines…. Even though it is a guide, often such requirements are taken as must haves. Six sampling lines for a 32m3 container is excessive and does not match the words in para 151 of 3 lines minimum. *Category : SUBSTANTIVE*
1019	147	Up to 15 000	**Sri Lanka** It will be better to address this in simple and most common terms i,e how many lines required for a volume of a 20 footer/ 40 footer container etc. *Category : SUBSTANTIVE*
1020	148	6 líneas de ~~muestreo~~ monitoreo para los primeros 3 000 m^3, más una línea por cada 1 500 m^3 adicionales	**Panama** Monitoreo se puede llevar el control en varias etapas para constatar que se cumplió con los objetivos de la fumigación. *Category : EDITORIAL*
1021	148	6 líneas de ~~muestreo~~ monitoreo para los primeros 3 000 m^3, más una línea por cada 1 500 m^3 adicionales	**OIRSA** Monitoreo se puede llevar el control en varias etapas para constatar que se cumplió con los objetivos de la fumigación. *Category : TECHNICAL*
1022	150	14 líneas de ~~muestreo~~ monitoreo para los primeros 15 000 m^3, más una línea por cada 5 500 m^3 adicionales	**Panama** Monitoreo se puede llevar el control en varias etapas para constatar que se cumplió con los objetivos de la fumigación. *Category : EDITORIAL*

#	Para	Text	Comment
1023	150	14 líneas de ~~muestreo~~ monitoreo para los primeros 15 000 m³, más una línea por cada 5 500 m³ adicionales	**OIRSA** Monitoreo se puede llevar el control en varias etapas para constatar que se cumplió con los objetivos de la fumigación. *Category : TECHNICAL*
1024	151	Depending on the commodity and the fumigation schedule, further sampling lines may be required to be placed within the commodities within the enclosure. As a guide, a minimum of three sampling lines should be used for the first 300 m³ of commodity, with additional lines for commodities that are tightly packed or difficult to penetrate. Sampling lines should be positioned inside commodity or places where it is expected that fumigant will be most difficult to reach.	**Canada** *Category : TECHNICAL*
1025	151	Depending on the commodity and the fumigation schedule, further sampling lines may be required to be placed within the commodities within the enclosure. As a guide, a minimum of three sampling lines in each commodity layer should be used for the first 300 m³ of commodity, with additional lines for commodities that are tightly ~~packed~~ packed, or difficult to penetrate.	**EPPO** Please, specify that it refer to each layer commodity layer. **Russian Federation** I agree *Category : TECHNICAL*
1026	151	~~Depending on the commodity and the fumigation schedule, further sampling lines may be required to be placed within the commodities within the enclosure. As a guide, a minimum of three sampling lines should be used for the first 300 m³ of commodity, with additional lines for commodities that are tightly packed or difficult to penetrate.~~	**Japan** See Japan's general comment. *Category : SUBSTANTIVE*
1027	151	Depending on the commodity and the fumigation schedule, further sampling lines may be required to be placed within the commodities within the enclosure. As a guide, a minimum of three sampling lines in each commodity layer should be used for the first 300 m³ of commodity, with additional lines for commodities that are tightly packed or difficult to penetrate.	**European Union** Please, specify that it refer to each layer commodity layer. *Category : EDITORIAL*
1028	151	~~Depending on the commodity and the fumigation schedule, further sampling lines may be required to be placed within the commodities within the enclosure. As a guide, a minimum of three sampling lines should be used for the first 300 m³ of commodity, with additional lines for~~	**United States of America** See United States comments in paragraphs 108 and 144 *Category : TECHNICAL*

#	Para	Text	Comment
		~~commodities that are tightly packed or difficult to penetrate.~~	
1029	151	En función del producto y del protocolo de fumigación, podrá ser necesario colocar en el recinto líneas de muestreo adicionales dentro de los productos. A título orientativo, debería utilizarse un mínimo de tres líneas de muestreo para los primeros 300 m^3 de producto, con líneas adicionales para los productos que estén embalados de forma muy ~~compacta o sean difíciles~~ compacta, para tener mejor monitoreo de ~~penetrar~~la fumigación.	**Panama** Mejor comprensión del texto *Category : EDITORIAL*
1030	151	En función del producto y del protocolo de fumigación, podrá ser necesario colocar en el recinto líneas de muestreo adicionales dentro de los productos. A título orientativo, debería utilizarse un mínimo de tres líneas de muestreo para los primeros 300 m^3 de producto, con líneas adicionales para los productos que estén embalados de forma muy ~~compacta o sean difíciles~~ compacta, para tener mejor monitoreo de ~~penetrar~~la fumigacion.	**OIRSA** Mejor comprensión del texto. *Category : EDITORIAL*
1031	152	**6.7.2 CT calculation**	**Ozone Secretariat** Proposed rewording: "It is the cumulative amount of the fumigant that kills the pest and the sum of the gram x hours is the best parameter to measure. Some fumigants work quickly (e.g. methyl bromide) others are best at low concentrations for a long time (e.g. phosphine). The CT is best calculated by multiplying together the lowest observed gas concentrations at two different times (usually start and finish), then multiplying the square root of this number by the time interval (in hours) between the two readings". The readings to be used should be the lowest of any of the readings at that particular time. The use the sum of the geometric means (between each successive valid fumigant reading over time) is better for fumigations longer than two hours and where the . Using all of the hourly readings (e.g. ((0+24)/2) +1+2+3+4 …+23 hrs), results in the CT estimates are easy to do and slightly underestimate the CT which is a good approach for achieving required efficacy under slightly leaky conditions. The application of SF is carried out by a "black box" that calculates the C:T value, what is the formula used by the company? *Category : SUBSTANTIVE*
1032	152	**6.7.2 CT calculation**	**Ozone Secretariat** This section launches into a techncial equation with no explaination as to what CT is or why it is important. Not sure this is the best or easiest method. May be best as an an Appendix with more explanation on why and how to use it. *Category : SUBSTANTIVE*
1033	152	~~**6.7.2 CT calculation**~~	**Australia** Lines 152 to 161 to be removed because this document is too techinical and is not to be used as a reference document to work out CT calculation. *Category : TECHNICAL*

#	Para	Text	Comment
1034	152	~~6~~7.7.2 Cálculo de ~~CT~~Concentración Tiempo (CT)	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1035	152	~~6~~7.7.2 Cálculo de CT	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1036	153	The CT is best calculated by multiplying together two observed gas concentrations at each location, taken one after the other, then multiplying the square root of this number by the time interval (in hours) between the two readings. The CT values obtained from a contiguous series of readings may then be added together to calculate the cumulative CT for the whole exposure period for that location. ~~The dose achieved at the location providing the lowest cumulative CT should be used as the achieved treatment dose.~~	**European Union** Text moved to end of Sect 6.7 for better reading flow. *Category : EDITORIAL*
1037	153	The CT is best calculated by multiplying together two observed gas concentrations at each location, taken one after the other, then multiplying the square root of this number by the time interval (in hours) between the two readings. ~~The CT values obtained from a contiguous series of readings may then be added together to calculate the cumulative CT for the whole exposure period for that location. The dose achieved at the location providing the lowest cumulative CT should be used as the achieved treatment dose.~~	**EPPO** Text moved to end of Sect 6.7 for better reading flow. *Category : EDITORIAL*
1038	153	~~The CT is best calculated by multiplying together two observed gas concentrations at each location, taken one after the other, then multiplying the square root of this number by the time interval (in hours) between the two readings. The CT values obtained from a contiguous series of readings may then be added together to calculate the cumulative CT for the whole exposure period for that location. The dose achieved at the location providing the lowest cumulative CT should be used as the achieved treatment dose.~~	**United States of America** Delete this section. This should have been calculated when the treatment is performed. *Category : TECHNICAL*

#	Para	Text	Comment
1039	153	.The CT ~~is best~~ can be calculated by ~~multiplying together two observed gas concentrations at each location, taken one after the other, then multiplying the square root of this~~ a number ~~by the time interval (in hours) between the two readings.~~ of methods The CT values obtained from a contiguous series of readings may then be added together to calculate the cumulative CT for the whole exposure period for that location. The number of contiguous measurements required to obtain a suitable estimate of the CT will depend on the shape of the dose ~~achieved at~~ curve over the ~~location providing~~ duration of the ~~lowest cumulative CT should~~ treatment. Unless there is no leakage or sorption of the fumigant, or the fumigation duration is only a few hours, readings will generally be ~~used as~~ required at least 4 times during the ~~achieved treatment dose~~fumigation.	**New Zealand** This corrects the text and improves the clarity. *Category : TECHNICAL*
1040	153	~~The CT is best calculated by multiplying together two observed gas concentrations at each location, taken one after the other, then multiplying the square root of this number by the time interval (in hours) between the two readings. The CT values obtained from a contiguous series of readings may then be added together to calculate the cumulative CT for the whole exposure period for that location. The dose achieved at the location providing the lowest cumulative CT should be used as the achieved treatment dose.~~	**Australia** Lines 152 to 161 to be removed because this document is too techinical and is not to be used as a reference document to work out CT calculation. *Category : TECHNICAL*
1041	153	The ~~CT~~ concentration - time (CT) is best calculated by multiplying together two observed gas concentrations at each location, taken one after the other, then multiplying the square root of this number by the time interval (in hours) between the two readings. The CT values obtained from a contiguous series of readings may then be added together to calculate the cumulative CT for the whole exposure period for that location. The dose achieved at the location providing the lowest cumulative CT should be used as the achieved treatment dose.	**Singapore** To spell out the acronym - CT used. *Category : EDITORIAL*
1042	153	The CT is best calculated by multiplying together two observed gas concentrations at each location, taken one	**Nepal** concentration-time or concentration-time product

#	Para	Text	Comment
		after the other, then multiplying the square root of this number by the time interval (in hours) between the two readings. The CT values obtained from a contiguous series of readings may then be added together to calculate the cumulative CT for the whole exposure period for that location. The dose achieved at the location providing the lowest cumulative CT should be used as the achieved treatment dose.	*Category : EDITORIAL*
1043	154	~~CT can be estimated using the following calculation:~~	**United States of America** See United States comment in paragraph 153 *Category : TECHNICAL*
1044	154	~~CT can be estimated using the following calculation:~~	**Australia** Lines 152 to 161 to be removed because this document is too technical and is not to be used as a reference document to work out CT calculation. *Category : TECHNICAL*
1045	155	$CT_{n,n+1}$ =	**EPPO** It would be useful to include additional information on the formula to convert between ppm and mg / m3. The Standard should also describe the calculation of ppm. *Category : SUBSTANTIVE*
1046	155	~~$CT_{n,n+1}$ =~~ 	**United States of America** See United States comment in paragraph 153 *Category : TECHNICAL*
1047	155	~~CT~~CTo,final = $_{n,n+1}$ ~~=~~ or CT0,final = $CT_{n,n+1}$= 	**New Zealand** Original formula is now corrected, and a second method (formula) is provided as an option. Not able to transfer to this document - will be sent separately... *Category : TECHNICAL*
1048	155	~~$CT_{n,n+1}$ =~~ 	**Australia** Lines 152 to 161 to be removed because this document is too technical and is not to be used as a reference document to work out CT calculation. *Category : TECHNICAL*
1049	155	CTn,n+1= (Tn+1 - Tn) * (Cn+Cn+1)/2 or $CT_{n,n+1}$ = 	**Korea, Republic of** There is an alternative calculation. *Category : TECHNICAL*
1050	156	~~where~~	**United States of America** See United States comment in paragraph 153 *Category : TECHNICAL*
1051	156	~~where~~	**Australia** Lines 152 to 161 to be removed because this document is too technical and is not to be used as a reference document to work out CT calculation. *Category : TECHNICAL*

#	Para	Text	Comment
1052	157	~~T_n is the time the first reading was taken, in hours~~	**United States of America** See United States comment in paragraph 153 *Category : TECHNICAL*
1053	157	~~T_n is the time the first reading was taken, in hours~~	**Australia** Lines 152 to 161 to be removed because this document is too technical and is not to be used as a reference document to work out CT calculation. *Category : TECHNICAL*
1054	158	~~T_{n+1} is the time the second reading was taken, in hours~~	**United States of America** See United States comment in paragraph 153 *Category : TECHNICAL*
1055	158	~~T~~Tfinal is the time of the final reading.~~$_{n+1}$ is the time the second reading was taken, in hours~~	**New Zealand** Needed for corrected formulae in [155]. *Category : TECHNICAL*
1056	158	~~T_{n+1} is the time the second reading was taken, in hours~~	**Australia** Lines 152 to 161 to be removed because this document is too technical and is not to be used as a reference document to work out CT calculation. *Category : TECHNICAL*
1057	159	~~C_n is the concentration reading at T_n, in g/m^3~~	**United States of America** See United States comment in paragraph 153 *Category : TECHNICAL*
1058	159	~~C_n is the concentration reading at T_n, in g/m^3~~	**Australia** Lines 152 to 161 to be removed because this document is too technical and is not to be used as a reference document to work out CT calculation. *Category : TECHNICAL*
1059	160	~~C_{n+1} is the concentration reading at T_{n+1}, in g/m^3~~	**United States of America** See United States comment in paragraph 153 *Category : TECHNICAL*
1060	160	~~C_{n+1} is the concentration reading at T_{n+1}, in g/m^3~~	**Australia** Lines 152 to 161 to be removed because this document is too technical and is not to be used as a reference document to work out CT calculation. *Category : TECHNICAL*
1061	161	~~$CT_{n,n+1}$ is the calculated CT between T_n and T_{n+1}, in g·h/m^3~~	**United States of America** See United States comment in paragraph 153 *Category : TECHNICAL*
1062	161	~~$CT_{n,n+1}$ is the calculated CT between T_n and T_{n+1}, in g·h/m^3~~CT0,final is the calculated CT between To and Tfinal, in g·h/m3	**New Zealand** Needed for corrected formulae in [155]. *Category : TECHNICAL*
1063	161	~~$CT_{n,n+1}$ is the calculated CT between T_n and T_{n+1}, in g·h/m^3~~	**Australia** Lines 152 to 161 to be removed because this document is too technical and is not to be used as a reference document to work out CT calculation. *Category : TECHNICAL*
1064	162	~~6~~7.8 Finalización de la fumigación	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1065	162	~~6~~7.8 Finalización de la fumigación	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas.

#	Para	Text	Comment
			Category : EDITORIAL
1066	163	Once the treatment time has been completed and the concentration and temperature readings indicate that the required minimum readings have been achieved, the application of the fumigation should be considered as being in accordance with this standard and the treatment schedule.	**Ozone Secretariat** Add: "In some circumstances, the fumigator can add extra gas, to "top up" and increase the concentration levels to prevent the fumigation from failing unnecessarily. This is not to be used for leaky enclosures but may happen due to higher sorption." Top up is allowed for some schedules and occurs with automatic applications. *Category : SUBSTANTIVE*
1067	163	Once the treatment time has been ~~completed and~~ completed, the ~~concentration~~ required minimum concentrations and temperature readings ~~indicate that the required minimum readings~~ have been achieved, the ~~application of the~~ fumigation should be considered as being completed. ~~in accordance with this standard and the treatment schedule.~~	**Ozone Secretariat** There are other factors (such as no wrapping) that need to be met as well. *Category : EDITORIAL*
1068	163	Once the treatment time has been completed and the concentration and temperature readings indicate that the required ~~minimum~~ readings of CT, temperature and minimum dose have been achieved, the application of the fumigation should be considered as being in accordance with this standard and the treatment schedule.	**European Union** Required parameters include also temperature and minimum dose. *Category : SUBSTANTIVE*
1069	163	Once the treatment time has been completed and the concentration and temperature readings indicate that the required ~~minimum~~ readings of CT, temperature and minimum dose have been achieved, the application of the fumigation should be considered as being in accordance with this standard and the treatment schedule.	**EPPO** Required parameters include also temperature and minimum dose *Category : SUBSTANTIVE*
1070	163	Once the treatment time has been completed and the concentration and temperature readings indicate that the required minimum readings have been achieved, the application of the fumigation should be considered as being in accordance with this standard and the treatment schedule. On completion of a fumigation treatment, proper ventilation i.e. natural aeration or forced ventilation must be conducted to ensure that the workplace threshold limit value (TLV) for the fumigant is not exceeded outside of the risk area.	**Singapore** Proper ventilation to ensure Workplace threshold limit value is acceptable for human health and safety should also be a key consideration in this draft ISPM. Hence, proposed addition of another sentence to para 163. *Category : SUBSTANTIVE*
1071	163	Una vez que haya finalizado el tiempo de tratamiento y las lecturas de concentración y temperatura indiquen que se han alcanzado las lecturas mínimas requeridas, debería considerarse que la aplicación de la fumigación se ha realizado de conformidad con la presente norma y el protocolo de tratamiento.	**Panama** Solicitar al coordinador de la norma, inclusión de un párrafo sobre medidas de seguridad del personal involucrado con la fumigación, haciendo énfasis en aspectos de aireación del recinto, previo a la inspección. *Category : SUBSTANTIVE*

#	Para	Text	Comment
1072	163	Una vez que haya finalizado el tiempo de tratamiento y las lecturas de concentración y temperatura indiquen que se han alcanzado las lecturas mínimas requeridas, debería considerarse que la aplicación de la fumigación se ha realizado de conformidad con la presente norma y el protocolo de tratamiento.	**OIRSA** Solicitar al coordinador de la norma, inclusión un párrafo sobre medidas de seguridad del personal involucrado con la fumigación, haciendo énfasis en aspectos de aireación del recinto, previo a la inspección. *Category : SUBSTANTIVE*
1073	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. Required treatment effects should not necessarily be expected on non-target pests on the fumigated commodity. 6.9 Safety after fumigation Sufficient ventilation is required after completion of fumigation for safety of fumigation staff and prevention of chemical damage. Ventilation duration should consider sorption capacity of the fumigant and commodity because continuous release of the fumigant may be happened even though the concentration was below the TLV immediately after completion of the fumigation.	**IPPC Regional Workshop Asia** To inlcude an additional para 6.9 on safety after fumigation. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Thailand** Thailand agree with APPPC comment. **Korea, Republic of** Republic of Korea agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Japan** Japan support regional comment. **Viet Nam** Vietnam agreed with this APPPC comment. *Category : SUBSTANTIVE*
1074	164	Indications of fumigation success can be obtained by inspection or testing to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. Required treatment effects should not necessarily be expected on non-target pests on the fumigated commodity.	**European Union** Not all pests can be detected by visual examination. *Category : TECHNICAL*
1075	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. ~~Required treatment~~ Treatment effects required for target pests should not necessarily be expected on non-target pests on the fumigated commodity.	**European Union** Clarity improved. *Category : EDITORIAL*
1076	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. Required	**European Union** Degasation is an important aspect that was missing. Reference to appropriate labelling and information has also been introduced. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		treatment effects should not necessarily be expected on non-target pests on the fumigated commodity. Degasation of the commodity should only take place after completion of the fumigation. For this purpose appropriate labelling and information exchange should be ensured when fumigation takes place during transport.	
1077	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. In circumstances when the minimum final concentration is not achieved after required time, a deviation in the concentration of 5 % is permitted provided additional treatment time is added to the end of the treatment to achieve the prescribed CT. Required treatment effects should not necessarily be expected on non-target pests on the fumigated commodity.	**European Union** Criteria how far prolongation can happen and necessary work should be set. *Category : SUBSTANTIVE*
1078	164	Indications of fumigation success can be obtained by inspection or testing to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. ~~Required~~ In circumstances when the minimum final concentration is not achieved after required time, a deviation in the concentration of 5 % is permitted provided additional treatment time is added to the end of the treatment to achieve the prescribed CT. Treatment effects required for target pests should not necessarily be expected on non-target pests on the fumigated commodity. Degasation of the commodity should only take place after completion of the fumigation. For this purpose appropriate labelling and information exchange should be ensured when fumigation takes place during transport.	**EPPO** Criteria how far prolongation can happen and necessary work should be set. Degasation is an important aspect that was missing. Reference to appropriate labelling and information has also been introduced. Clarity improved Not all pests can be detected by visual examination. *Category : TECHNICAL*
1079	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. Required treatment effects should not necessarily be expected on	**United States of America** NPPO requirements may be different. Last sentence: Additionally you do not fumigate non-target pests. The fumigation must control only target pests. *Category : TECHNICAL*

#	Para	Text	Comment
		non-target pests on the fumigated commodity.	
1080	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. Required treatment effects should not necessarily be expected on non-target pests on the fumigated commodity. In some circumstances, the fumigator can add extra gas, to "top up" and increase the concentration levels to prevent the fumigation from failing unnecessarily. This is not to be used for leaky ennclosures but may happen due to higher sorption.	**New Zealand** Top up is allowed for some schedules and occur with automatic applications *Category : TECHNICAL*
1081	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. Required treatment effects should not necessarily be expected on non-target pests on the fumigated commodity. At the completion of a fumigation, ventilation must be completed to ensure correct dilution of fumigants and safe handling of commodity through transportation and upon arrival and final destination.	**Australia** Ventilation is an important part of fumigation. Fumigation is not complete until ventilation is completed. Some guidelines may be provided on ventilation. *Category : SUBSTANTIVE*
1082	164	~~Indications of fumigation success can be obtained by inspection to verify target pest mortality.~~ For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. Required treatment effects should not necessarily be expected on non-target pests on the fumigated commodity.	**Australia** Some fumigations cannot be inspected to determine efficacy. This includes things such as timber or FCLs treated prior to export unless they are fully unpacked. *Category : SUBSTANTIVE*
1083	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. Required treatment effects should not necessarily be expected on	**Jamaica** Provisions must be made for proper aeration *Category : SUBSTANTIVE*

#	Para	Text	Comment
		non-target pests on the fumigated commodity.	
1084	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved~~. Required treatment effects should not necessarily be expected on non-target pests on the fumigated commodity~~.	**IPPC Regional Workshop Central Asia & Central Europe** RW conclusion: This sentence is in contradiction with the statement in paragraph 223 and should therefore be deleted. *Category : SUBSTANTIVE*
1085	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. Required treatment effects should not necessarily be expected on non-target pests on the fumigated commodity. 6.9 Safety after fumigation Sufficient ventilation is required after completion of fumigation for safety of fumigation staff and prevention of chemical damage. Ventilation duration should consider sorption capacity of the fumigant and commodity because continuous release of the fumigant may be happened even though the concentration was below the TLV immediately after completion of the fumigation.	**Korea, Republic of** Safety condition after fumigation should be described. *Category : TECHNICAL*
1086	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. ~~Required treatment effects should not necessarily be expected on non-target pests on the fumigated commodity.~~	**Azerbaijan** *Category : SUBSTANTIVE*
1087	164	Indications of fumigation success can be obtained by inspection to verify target pest mortality. For many fumigations an extended post-fumigation period may be required before full pest mortality is achieved. Required treatment effects should not necessarily be expected on non-target pests on the fumigated commodity.	**IPPC Regional Workshop Near East** More information can be added on what kind of fumigants/pest/commodity that an extended post-fumigation period may be required. *Category : SUBSTANTIVE*
1088	165	**7. ~~Phytosanitary System~~ Adequate Systems at treatment facilities~~Security~~**	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : TECHNICAL*

#	Para	Text	Comment
1089	165	7. ~~Phytosanitary System~~ Adequate Systems at treatment facilities~~Security~~	**IPPC Regional Workshop Latin America** This section not describe phytosanitary security. Text changes to align with draft on temperature treatment. In addition, phytoanitary security is a glossary term that should not be used with an other meaning in a ISPM. *Category : TECHNICAL*
1090	165	7. ~~Phytosanitary System~~ Adequate Systems at Fumigation Entities~~Security~~	**IPPC Regional Workshop Asia** To change the title to reflect the associated paragraphs. **APPPC** agreed by APPPC **Korea, Republic of** Republic of Korea agree with APPPC comment. **Japan** Japan support regional comment. **Viet Nam** Vietnam agreed with this APPPC comment. *Category : SUBSTANTIVE*
1091	165	7. A~~Phytosanitary System~~ dequate Systems at treatment facilities~~Security~~	**COSAVE** This section does not describe phytosanitary security. In addition "phytosanitary security" is a Glossary term that should not be used with another meaning than the Glossary definition in ISPMs. Text changed to align with the draft ISPM on temperature treatments. *Category : TECHNICAL*
1092	165	7. Adequates Systems at treatment facilities~~Phytosanitary System Security~~	**Peru** This section does not describe phytosanitary security. In addition "phytosanitary security" is a Glossary term that should not be used with another meaning than the Glossary definition in ISPMs. Text changed to align with the draft ISPM on temperature treatments *Category : TECHNICAL*
1093	165	7. Adequate System at treatment facilities~~Phytosanitary System Security~~	**Brazil** This section does not describe phytosanitary security. In addition "phytosanitary security" is a Glossary term that should not be used with another meaning than the Glossary definition in ISPMs. Text changed to align with the draft ISPM on temperature treatments *Category : TECHNICAL*
1094	165	7. Adequate s~~Phytosanitary System~~ ystems at treatment facilities~~Security~~	**Argentina** This section does not describe phytosanitary security. In addition "phytosanitary security" is a Glossary term that should not be used with another meaning than the Glossary definition in ISPMs. Text changed to align with the draft ISPM on temperature treatments *Category : TECHNICAL*
1095	165	7. ~~Phytosanitary System~~ Adequate Systems at treatment facilities~~Security~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 0:43 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
1096	165	7. Adequate~~Phytosanitary System~~ Systems at treatment facilities~~Security~~	**Uruguay** This section does not describe phytosanitary security. In addition "phytosanitary security" is a Glossary term that should not be used with another meaning than the Glossary definition in ISPMs. Text changed to align with the draft ISPM on temperature treatments *Category : TECHNICAL*
1097	165	7. Adequate Systems at Fumigation	**Thailand** This title is not clear. As the subtitles under this title are similar to those describing in the

#	Para	Text	Comment
		EntitiesPhytosanitary System Security	draft ISPM: Requirements for the use of temperature treatment as phytosanitary measures, this title should be changed accordingly. *Category : EDITORIAL*
1098	165	78. **Seguridad del sistema fitosanitario**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1099	165	78. **Seguridad del sistema fitosanitario**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1100	166	Well-designed and closely monitored systems Systems for treatment delivery, and for safeguarding of treated commoditiescommodities should be designed, provide an assurance used and monitored to ensure that treatments are properly conductedconducted and commodities are protected from infestation.	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : TECHNICAL*
1101	166	Well-designed and closely monitored systems Systems for treatment delivery, and for safeguarding of treated commoditiescommodities should be designed, provide an assurance used and monitored to ensure that treatments are properly conductedconducted and commodities are protected from infestation.	**IPPC Regional Workshop Latin America** Text modified to better describe the characteristic of the system and to align with the draft on temperatute treatment *Category : TECHNICAL*
1102	166	Well-designed and closely monitored systems Systems for treatment delivery, and for safeguarding of treated commoditiescommodities should be designed, provide an assurance used and monitored to ensure that treatments are properly conductedconducted and commodities are protected from infestation.	**COSAVE** Text modified to better describe the characteristics of the system and to align with the draft ISPM on temperature treatments. *Category : TECHNICAL*
1103	166	Well-designed and closely monitored systems Systems for treatment delivery, delivery and for safeguarding of treated commoditiescommodities should be designed, provide an assurance used and monitored to ensure that treatments are properly conductedconduced and commodities are protected from infestation.	**Peru** Text modified to better describe the characteristics of the system and to align with the draft ISPM on temperature treatments *Category : TECHNICAL*
1104	166	Well-designed and closely monitored systems Systems for treatment delivery, delivery and for safeguarding of treated commoditiescommodities should be designed, provide an assurance used and monitored to ensure that treatments are properly conductedconducted and commodities are	**Brazil** Text modified to better describe the characteristics of the system and to align with the draft ISPM on temperature treatments *Category : TECHNICAL*

#	Para	Text	Comment
		protected from infestation.	
1105	166	~~Well-designed and closely monitored systems~~ Systems for treatment ~~delivery,~~ delivery and for safeguarding of treated ~~commodities~~commodities should be designed, ~~provide an assurance~~ used and monitored to ensure that treatments are properly ~~conducted~~conducted and commodities are protected from infestation.	**Argentina** Text modified to better describe the characteristics of the system and to align with the draft ISPM on temperature treatments *Category : TECHNICAL*
1106	166	~~Well-designed and closely monitored systems~~ Systems for treatment delivery, and for safeguarding of treated ~~commodities~~commodities should be designed, ~~provide an assurance~~ used and monitored to ensure that treatments are properly ~~conducted~~conducted and commodities are protected from infestation.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 0:47 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
1107	166	~~Well-designed~~ Confidence in the adequacy of a fumigation as a phytosanitary measure is primarily based on assurance that the treatment is effective against the pest of concern under specific conditions and ~~closely monitored systems~~ the treatment has been properly applied. Systems for treatment ~~delivery~~delivery should be designed, used and ~~for safeguarding of treated commodities, provide an assurance~~ monitored to ensure that treatments are properly ~~conducted~~conducted and commodities are protected from infestation and reinfestation.	**European Union** For consistency, we propose to replace this paragraph with paragraph 149 of the draft standard on temperature treatments that results from first consultation. *Category : SUBSTANTIVE*
1108	166	~~Well-designed~~ Confidence in the adequacy of a fumigation as a phytosanitary measure is primarily based on assurance that the treatment is effective against the pest of concern under specific conditions and ~~closely monitored systems~~ the treatment has been properly applied. Systems for treatment ~~delivery~~delivery should be designed, used and ~~for safeguarding of treated commodities, provide an assurance~~ monitored to ensure that treatments are properly ~~conducted~~conducted and commodities are protected from infestation and reinfestation.	**EPPO** For consistency, we propose to replace this paragraph with paragraph 149 of the draft standard on temperature treatments that results from first consultation. *Category : SUBSTANTIVE*
1109	166	~~Well-designed and closely monitored systems~~ Systems for treatment delivery, and for safeguarding of treated ~~commodities~~commodities should be designed, ~~provide an~~	**Uruguay** Text modified to better describe the characteristics of the system and to align with the draft ISPM on temperature treatments *Category : TECHNICAL*

#	Para	Text	Comment
		~~assurance~~ used and monitored to ensure that treatments are properly ~~conducted~~conducted and commodities are protected from infestation.	
1110	166	Los sistemas de aplicación de tratamientos y protección de los productos tratados bien diseñados y monitoreados ~~concienzudamente garantizan~~ que garanticen la correcta realización de los tratamientos.	**Panama** Uso correctos de términos en idioma español. *Category : EDITORIAL*
1111	166	Los sistemas de aplicación de tratamientos y protección de los productos tratados bien diseñados y monitoreados ~~concienzudamente garantizan~~ que garanticen la correcta realización de los tratamientos.	**OIRSA** Uso correctos de términos en idioma español. *Category : EDITORIAL*
1112	167	The NPPO of the country in which the treatment facility is located or where treatments are ~~initiated should ensure that treatments are properly applied to meet the phytosanitary import~~ initiated, is responsiblefor ensuring systems requirements ~~of the importing country and that commodities~~ are ~~protected from infestation and reinfestation~~met.	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : TECHNICAL*
1113	167	The NPPO of the country in which the treatment facility is located or where treatments are ~~initiated should ensure that treatments are properly applied to meet the phytosanitary import~~ initiated, is responsiblefor ensuring systems requirements ~~of the importing country and that commodities~~ are ~~protected from infestation and reinfestation~~met.	**IPPC Regional Workshop Latin America** Text modified as consequential change proposed in para. 166. *Category : TECHNICAL*
1114	167	The NPPO of the country in which the treatment facility is located or where treatments are ~~initiated should ensure that treatments are properly applied to meet the phytosanitary import~~ initiated, is responsible for ensuring system requirements ~~of the importing country and that commodities~~ are ~~protected from infestation and reinfestation~~met.	**Peru** Text modified as a consequential change according comment in paragraph 166 *Category : TECHNICAL*
1115	167	The NPPO of the country in which the treatment facility is located or where treatments are ~~initiated should ensure that treatments are properly applied to meet the phytosanitary import~~ initiated, is responsible for ensuring system requirements ~~of the importing country and that commodities are protected from infestation and reinfestation~~met.	**Brazil** Text modified as a consequential change according comment in paragraph 166 *Category : TECHNICAL*
1116	167	The NPPO of the country in which the treatment facility is located or where treatments are ~~initiated should ensure that~~	**Argentina** Text modified as a consequential change according comment in paragraph 166 *Category : TECHNICAL*

#	Para	Text	Comment
		~~treatments are properly applied to meet the phytosanitary import~~ initiated, is responsible for ensuring system requirements ~~of the importing country and that commodities~~ are ~~protected from infestation and reinfestation~~met.	
1117	167	The NPPO of the country in which the treatment facility is located or where treatments are ~~initiated should ensure that treatments are properly applied to meet the phytosanitary import~~ initiated, is responsiblefor ensuring systems requirements ~~of the importing country and that commodities~~ are ~~protected from infestation and reinfestation~~met.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 0:50 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
1118	167	The NPPO of the country in which the treatment facility is located or where treatments are initiated should ensure that ~~treatments are properly applied to meet~~ the ~~phytosanitary import~~ system requirements ~~of the importing country and that commodities~~ are ~~protected from infestation and reinfestation~~met.	**European Union** For consistency, we propose to replace the end of this this paragraph with the wording of paragraph 150 of the draft standard on temperature treatments that results from first consultation. *Category : SUBSTANTIVE*
1119	167	The NPPO of the country in which the treatment facility is located or where treatments are initiated should ensure that ~~treatments are properly applied to meet~~ the ~~phytosanitary import~~ system requirements ~~of the importing country and that commodities~~ are ~~protected from infestation and reinfestation~~met.	**EPPO** For consistency, we propose to replace the end of this this paragraph with the wording of paragraph 150 of the draft standard on temperature treatments that results from first consultation. *Category : SUBSTANTIVE*
1120	167	The NPPO of the country in which the treatment facility is located or where treatments are ~~initiated should ensure that treatments are properly applied to meet the phytosanitary import~~ initiated, is responsible for ensuring systems requirements ~~of the importing country and that commodities~~ are ~~protected from infestation and reinfestation~~met.	**Uruguay** Text modified as a consequential change according comment in paragraph 166 *Category : TECHNICAL*
1121	167	The NPPO of the country in which ~~the treatment facility is located or where~~ treatments are initiated should ensure that treatments are properly applied to meet the phytosanitary import requirements of the importing country and that commodities are protected from infestation and reinfestation.	**Azerbaijan** *Category : SUBSTANTIVE*
1122	167	The NPPO of the country in which the treatment facility is located or where treatments are initiated should ensure that treatments are properly applied to meet the phytosanitary	**Indonesia** *Category : EDITORIAL*

#	Para	Text	Comment
		import requirements of the importing country and that commodities are protected from infestation and reinfestation. Indonesia would like to change the word initiated by conducted	
1123	167	The NPPO of the country in which the treatment facility is located or where treatments are ~~initiated should ensure that treatments are properly applied to meet the phytosanitary import~~ initiated, is responsible for ensuring systems requirements ~~of the importing country and that commodities~~ are ~~protected from infestation and reinfestation~~met.	**COSAVE** Text modified as consequential change proposed in para. 166. *Category : TECHNICAL*
1124	168	**~~8~~7.1 Autorización a entidades fumigadoras**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1125	168	**~~7~~8.1 Autorización a entidades fumigadoras**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1126	169	Fumigation entities should be authorized by the NPPO in the country in which the phytosanitary treatments are conducted (see 7.6). NPPOs should maintain a list of authorized fumigation entities capable of undertaking fumigation treatments. The NPPO of the exporting country is responsible for authorizing the entity applying the treatment during transport.	**Costa Rica** Delete this text from this section and move from para.176 *Category : TECHNICAL*
1127	169	Fumigation entities should be authorized by the NPPO in the country in which the phytosanitary treatments are conducted (see 7.6). NPPOs should maintain a list of authorized fumigation entities capable of undertaking fumigation treatments. The NPPO of the exporting country is responsible for authorizing the entity applying the treatment during transport.	**IPPC Regional Workshop Latin America** Text moved from para. 176 *Category : TECHNICAL*

#	Para	Text	Comment
		Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.	
1128	169	Fumigation entities should be authorized by the NPPO in the country in which the phytosanitary treatments are conducted (see 7.6). NPPOs should maintain a list of authorized fumigation entities capable of undertaking fumigation treatments. The NPPO of the exporting country is responsible for authorizing the entity applying the treatment during transport. Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 0:56 Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
1129	169	Fumigation entities should be authorized by the NPPO in the country in which the phytosanitary treatments are conducted (see section 7.6). NPPOs should maintain a list of authorized fumigation entities capable of undertaking fumigation treatments. The NPPO of the exporting country is responsible for authorizing the entity applying the treatment during transport.	**European Union** *Category : EDITORIAL*
1130	169	Fumigation entities should be authorized by the NPPO in the country in which the phytosanitary treatments are conducted (see 7.6). NPPOs should maintain a list of authorized fumigation entities capable of undertaking fumigation treatments. The NPPO of the exporting country is responsible for authorizing the entity applying the treatment during transport. NPPOs should set requirements for entity authorisation including training of personel, fumigation procedures and adequate equipment.	**European Union** The text needs basic information on authorisation pending further development in the proposed standard on "Authorization of entities". *Category : SUBSTANTIVE*
1131	169	Fumigation entities should be authorized by the NPPO in the country in which the phytosanitary treatments are conducted or initiated (when fumigation takes place during transport) (see 7.6). NPPOs should maintain a list of authorized fumigation entities capable of undertaking	**European Union** Greater clarity. *Category : EDITORIAL*

#	Para	Text	Comment
		fumigation treatments. ~~The NPPO of the exporting country is responsible for authorizing the entity applying the treatment during transport.~~	
1132	169	Fumigation entities should be authorized by the NPPO in the country in which the phytosanitary treatments are conducted or initiated (when fumigation takes place during transport) (see section 7.6). NPPOs should maintain a list of authorized fumigation entities capable of undertaking fumigation treatments. NPPOs should set requirements for entity authorisation including training of personel, fumigation procedures and adequate equipment~~The NPPO of the exporting country is responsible for authorizing the entity applying the treatment during transport.~~	**EPPO** Greater clarity The text needs basic information on authorisation pending further development in the proposed standard on "Authorization of entities" *Category : SUBSTANTIVE*
1133	169	Fumigation entities should be authorized by the NPPO in the country ~~in which~~ where the phytosanitary treatments are conducted (see 7.6). NPPOs should maintain a list of authorized fumigation entities capable of undertaking fumigation treatments. The NPPO of the exporting country is responsible for authorizing the entity applying the treatment during transport.	**Sri Lanka** *Category : EDITORIAL*
1134	169	Las entidades fumigadoras ~~deberían~~ deben tener autorización de la ONPF del país en el que se realizan los tratamientos fitosanitarios (véase el apartado 7.6). Las ONPF ~~deberían~~ deben mantener una lista de las entidades fumigadoras autorizadas capaces de realizar tratamientos de fumigación. La responsabilidad de autorizar a la entidad que aplique un tratamiento durante el transporte recae en la ONPF del país exportador. La ONPF del país en el que se realiza la fumigación debería aprobar procedimientos específicos adecuados para cada entidad fumigadora y tratamiento de producto.	**Panama** Uso correcto de términos y mandatorio en la ONPF. *Category : EDITORIAL*
1135	169	Las entidades fumigadoras deberían tener autorización de la ONPF del país en el que se realizan los tratamientos fitosanitarios (véase el apartado 7.6). Las ONPF deberían mantener una lista de las entidades fumigadoras autorizadas capaces de realizar tratamientos de fumigación. La responsabilidad de autorizar a la entidad que aplique un	**OIRSA** Uso correcto de términos y mandatorio en la ONPF. *Category : TECHNICAL*

#	Para	Text	Comment
		tratamiento durante el transporte recae en la ONPF del país exportador. La ONPF del país en el que se realiza la fumigación debería aprobar procedimientos específicos adecuados para cada entidad fumigadora y tratamiento de productos.	
1136	170	**7.2 Prevention of infestation after ~~treatment~~ fumigation**	**IPPC Regional Workshop Asia** replace treatment with fumigation for consistency. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Nepal** Support and agree with Regional Comment **Japan** Japan support regional comment. **Viet Nam** Vietnam agreed with this APPPC comment. *Category : EDITORIAL*
1137	170	**~~7~~8.2 Prevención de la infestación después del tratamiento**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1138	170	**~~7~~8.2 Prevención de la infestación después del tratamiento**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1139	171	Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted. The fumigation entity should implement the necessary measures to prevent possible infestation or contamination of the commodity after fumigation. The following measures may be required:	**Peru** NPPO should approve fumigation facilities and procedures and the fumigation entities should implement them. *Category : TECHNICAL*
1140	171	Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted. The fumigation entity should implement the necessary measures to prevent possible infestation or contamination of the commodity after fumigation. The following measures may be required:	**Brazil** NPPO should approve fumigation facilities and procedures and the fumigation entities should implement them. *Category : TECHNICAL*
1141	171	Specific procedures appropriate for each fumigation entity	**Argentina**

#	Para	Text	Comment
		and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted. The fumigation entity should implement the necessary measures to prevent possible infestation or contamination of the commodity after fumigation. The following measures may be required:	NPPO should approve fumigation facilities and procedures and the fumigation entities should implement them. *Category : TECHNICAL*
1142	171	The consignment owner is responsible for prevention of infestation after treatment and may cooperate with specific fumigation ~~entity should implement the~~ entities on how to achieve this. The necessary measures should be implemented to prevent possible infestation or contamination of the commodity after fumigation. The following measures may be required:	**European Union** The main responsible person should be consignment owner or possessor. That should be explained in standard. *Category : SUBSTANTIVE*
1143	171	The consignment owner is responsible for prevention of infestation after treatment and may cooperate with specific fumigation ~~entity should implement the~~ entities on how to achieve this. The necessary measures should be implemented to prevent possible infestation or contamination of the commodity after fumigation. The following measures may be required:	**EPPO** The main responsible person should be the consignment owner or possessor. This should be explained in the Standard. *Category : SUBSTANTIVE*
1144	171	Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted The fumigation entity should implement the necessary measures to prevent possible infestation or contamination of the commodity after fumigation. The following measures may be required:	**Uruguay** NPPO should approve fumigation facilities and procedures and the fumigation entities should implement them. *Category : TECHNICAL*
1145	171	The fumigation entity should implement the necessary measures as long as the consignment is under its control to prevent possible infestation or contamination of the commodity after fumigation. The following measures may be required:	**IPPC Regional Workshop Central Asia & Central Europe** RW conclusion: only as long as the consigment is under control of the operator, he can be responsible for it. this should explicitly be stated. *Category : SUBSTANTIVE*
1146	171	The fumigation ~~entity~~ providers should implement the necessary measures to prevent possible infestation or contamination of the commodity after fumigation. The following measures may be required:	**PPPO** replace the word entities with fumigation providers in entire standard *Category : SUBSTANTIVE*

#	Para	Text	Comment
1147	171	Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted. The fumigation entity should implement the necessary measures to prevent possible infestation or contamination of the commodity after fumigation. The following measures may be required:	**COSAVE** NPPO should approve fumigation facilities and procedures and entities should implement them. *Category : TECHNICAL*
1148	171	La ~~entidad fumigadora debería aplicar~~ ONPF debe asegurar el cumplimiento de las medidas necesarias para evitar la ~~posible~~ infestación o reinfestacion o contaminación ~~del producto~~ después de la fumigación~~.~~ , Podrá ser ~~necesario aplicar~~ las siguientes medidas:	**OIRSA** Reitera la responsabilidad de la ONPF en mantener la seguridad de los envíos después del tratamiento. *Category : TRANSLATION*
1149	172	keeping the commodity in a pest free ~~enclosure~~enclosure after fumigation .	**Nepal** after fumigation **Nepal** Support Nepal comment *Category : EDITORIAL*
1150	173	packing the commodity immediately after fumigation, where required	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : TECHNICAL*
1151	173	packing the commodity immediately after fumigation, where required	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
1152	173	packing the commodity immediately after fumigation, where required	**CA** Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
1153	173	packing the commodity immediately ~~after fumigation~~	**Singapore** To delete duplicating term - "after fumigation" in para 172 - 175 as this term has already been stated at the end of the sentence in para 171. *Category : EDITORIAL*
1154	173	embalar el producto inmediatamente después de la fumigación~~;~~, en los casos que se requiera.	**Colombia** En la mayoría de los casos los productos se encuentran en su embalaje final. *Category : TECHNICAL*
1155	175	dispatching the commodity immediately after fumigation, where required.	**CA** Accepted from IPPC Regional Workshop LA. *Category : TECHNICAL*
1156	175	dispatching the commodity immediately after fumigation, where required.	**IPPC Regional Workshop Latin America** *Category : TECHNICAL*
1157	175	dispatching the commodity immediately after fumigation.	**IPPC Regional Workshop Latin America** "dispatching" should be translated as "despachar" *Category : TRANSLATION*

#	Para	Text	Comment
1158	175	dispatching the commodity immediately ~~after fumigation~~.	**Singapore** To delete duplicating term - "after fumigation" in para 172 - 175 as this term has already been stated at the end of the sentence in para 171. *Category : EDITORIAL*
1159	175	dispatching the commodity immediately after fumigation. - pest proof cartons.	**PPPO** after 175 a new inculsion of "including pest proof cartons"? *Category : SUBSTANTIVE*
1160	175	~~expedir~~ Despachar el producto inmediatamente después de la fumigación.	**Colombia** Mejor redacción y claridad en el texto. *Category : EDITORIAL*
1161	175	~~expedir~~ exportar el producto inmediatamente después de la fumigación.	**Panama** Uso correcto de términos *Category : EDITORIAL*
1162	175	~~expedir~~ exportar el producto inmediatamente después de la fumigación.	**OIRSA** Uso correcto de términos. *Category : EDITORIAL*
1163	176	~~Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.~~	**Peru** Text moved to paragraph 171 *Category : TECHNICAL*
1164	176	~~Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.~~	**Brazil** Text moved to paragraph 171. *Category : TECHNICAL*
1165	176	~~Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.~~	**Argentina** Text moved to paragraph 171 *Category : TECHNICAL*
1166	176	~~Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 0:55 Accepted from Latin American IPPC regional workshop *Category : TECHNICAL*
1167	176	~~Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.~~	**IPPC Regional Workshop Latin America** Text moved to para. 169 *Category : TECHNICAL*
1168	176	~~Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.~~	**European Union** This aspect is not required in this level of detail. *Category : SUBSTANTIVE*
1169	176	~~Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.~~	**EPPO** This aspect is not required in this level of detail *Category : SUBSTANTIVE*
1170	176	~~Specific procedures appropriate for each fumigation entity~~	**Uruguay**

#	Para	Text	Comment
		~~and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.~~	Text moved to paragraph 171 *Category : TECHNICAL*
1171	176	~~Specific procedures appropriate for each fumigation entity and commodity treatment should be approved by the NPPO in the country in which the fumigation is conducted.~~	**COSAVE** Text moved to para. 171 *Category : EDITORIAL*
1172	176	La ONPF del país en el que se realiza la fumigación debería aprobar procedimientos específicos adecuados para cada entidad fumigadora y tratamiento de producto.	**Colombia** Este párrafo debe ser trasladado a la sección de "Autorización a entidades fumigadoras", con el fin de dar claridad al papel regulador que tienen las ONPF, ante las entidades prestadoras de los servicios de fumigación (linea 169). *Category : EDITORIAL*
1173	176	~~La ONPF del país en el que se realiza la fumigación debería aprobar procedimientos específicos adecuados para cada entidad fumigadora y tratamiento de producto.~~	**Panama** Este párrafo debería ser trasladado al párrafo 169, para clarificar la autoridad que posee la ONPF ante las entidades fumigadoras. *Category : EDITORIAL*
1174	176	La ONPF del país en el que se realiza la fumigación debería aprobar procedimientos específicos adecuados para cada entidad fumigadora y tratamiento de producto.	**OIRSA** Este párrafo debería ser trasladado al párrafo 169, para clarificar la autoridad que posee la ONPF ante las entidades fumigadoras. *Category : EDITORIAL*
1175	177	**7.3 ~~Environment, health~~ Health and safety**	**Korea, Republic of** *Category : EDITORIAL*
1176	177	**7.3 Environment, health and safety**	**Montenegro** Maybe somewhere take into the consideration also of the fumigation of commodities wich are food (residue) *Category : TECHNICAL*
1177	177	**7.3 ~~Medio~~ ambiente, salud y seguridad**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. El término "ambiente" es el correcto. *Category : EDITORIAL*
1178	177	**~~7~~8.3 ~~Medio~~ ambiente, salud y seguridad**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. El término "ambiente" es el correcto. *Category : EDITORIAL*
1179	178	Prior to any application of a fumigant, a review of the environment, health and safety risks should be completed to ensure that all the requirements of domestic regulations are met and the safety of applicators and those living or working in proximity to the fumigation site are ensured. The fumigant used should be appropriate to the commodity being fumigated, ~~and~~ the equipment and enclosure appropriate to the ~~circumstances~~circumstances and proper ventilation of fumigation enclosure to ensure acceptable workplace threshold limit value (TLV) of the fumigant with	**IPPC Regional Workshop Asia** **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **Thailand** Thailand agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Japan** Japan support regional comment. **Viet Nam** Vietnam agreed with this APPPC comment.

#	Para	Text	Comment
		minimised & mitigated risk to the environment and human health and safety.	*Category : SUBSTANTIVE*
1180	178	Prior to any application of a fumigant, a review of the health and safety risks should be completed to ensure that all the requirements of domestic regulations are met and the safety of applicators and those living or working in proximity to the fumigation site are ensured. The fumigant used should be appropriate to the commodity being fumigated, and the equipment and enclosure appropriate to the circumstances.	**Ozone Secretariat** Add: "Fumigations should meet the local health and safety regulations during (including personal protection) and after treatment (e.g. venting to safe levels)". Best put in as a reminder. *Category : SUBSTANTIVE*
1181	178	Prior to any application of a fumigant, ~~a review of the~~ health and safety risks should be ~~completed~~ identified to ensure that all the requirements of domestic regulations are met and the safety of applicators and those living or working in proximity to the fumigation site are ensured. The fumigant used should be appropriate to the commodity being fumigated, and the equipment and enclosure appropriate to the circumstances.	**European Union** Is it really a 'review' which is meant here and not just identification of those risks? *Category : TECHNICAL*
1182	178	Prior to any application of a fumigant, ~~a review of the~~ health and safety risks should be ~~completed~~ identified to ensure that all the requirements of domestic regulations are met and the safety of applicators and those living or working in proximity to the fumigation site are ensured. The fumigant used should be appropriate to the commodity being fumigated, and the equipment and enclosure appropriate to the circumstances.	**EPPO** Is it really a 'review' which is meant here and not just identification of those risks? *Category : TECHNICAL*
1183	178	Prior to any application of a fumigant, a review of the health and safety risks should be completed to ensure that all the requirements of domestic regulations are met and the safety of applicators and those living or working in proximity to the fumigation site are ensured. The fumigant used should be appropriate to the commodity being fumigated, and the equipment and enclosure appropriate to the circumstances.	**United States of America** Must follow label, federal, state and local requirements *Category : TECHNICAL*
1184	178	Prior to any application of a fumigant, a review of the health and safety risks should be completed to ensure that all the requirements of domestic regulations are met and the	**Jamaica** Should there be a Post Fumigation Handling Section *Category : SUBSTANTIVE*

#	Para	Text	Comment
		safety of applicators and those living or working in proximity to the fumigation site are ensured. The fumigant used should be appropriate to the commodity being fumigated, and the equipment and enclosure appropriate to the circumstances.	
1185	178	Prior to any application of a fumigant, a review of the environment, health and safety risks should be completed to ensure that all the requirements of domestic regulations are met and the safety of applicators and those living or working in proximity to the fumigation site are ensured. The fumigant used should be appropriate to the commodity being fumigated, ~~and~~ the equipment and enclosure appropriate to the ~~circumstances~~circumstances and proper ventilation of fumigation enclosure to ensure acceptable workplace threshold limit value (TLV) of the fumigant with minimised & mitigated risk to the environment and human health and safety.	**Singapore** To include " environment in the first sentence to be in line with the title. To close the last sentence with additions of "proper ventilation of fumigation enclosure to ensure acceptable workplace threshold limit value (TLV) of the fumigant with minimsed & mitigated risk to the enviroment and human health and safety" for better sentence structure & inclusion of critical elements i.e. ventilation, TLV for environment and safety concerns. *Category : SUBSTANTIVE*
1186	178	Antes de cualquier aplicación de un fumigante, debería realizarse un examen completo de los riesgos para la salud y la seguridad, con objeto de asegurarse de que se cumplen todos los requisitos de la reglamentación nacional y se garantiza la seguridad de los aplicadores y de las personas que viven o trabajan cerca del lugar de fumigación. Debería utilizarse un fumigante adecuado para el producto que se fumiga, y el equipo y el recinto deberían ser los adecuados para las circunstancias.	**Panama** Se solicita al coordinador de la norma, elaborar y adicionar un párrafo que haga referencia al ambiente. *Category : SUBSTANTIVE*
1187	178	Antes de cualquier aplicación de un fumigante, debería realizarse un examen completo de los riesgos para la salud y la seguridad, con objeto de asegurarse de que se cumplen todos los requisitos de la reglamentación nacional y se garantiza la seguridad de los aplicadores y de las personas que viven o trabajan cerca del lugar de fumigación. Debería utilizarse un fumigante adecuado para el producto que se fumiga, y el equipo y el recinto deberían ser los adecuados para las circunstancias.	**OIRSA** Se solicita al coordinador de la norma, elaborar y adicionar un párrafo que haga referencia al ambiente. *Category : SUBSTANTIVE*
1188	179	An assessment of health and safety risks associated with handling of fumigated consignments should be completed prior to unloading or inspecting fumigated commodities.	**United States of America** What about the risks on the label? *Category : TECHNICAL*
1189	179	An assessment of health and safety risks associated with handling of fumigated consignments should be completed prior to unloading or inspecting fumigated commodities.	**New Zealand** Best put in as a reminder. *Category : TECHNICAL*

#	Para	Text	Comment
		Fumigations should meet the local health and safety regulations during (including personal protection) and after treatment (e.g. venting to safe levels).	
1190	179	An assessment of health and safety risks associated with handling of fumigated consignments should be completed prior to unloading or inspecting fumigated commodities.	**PPPO** have a paragraph for when after fumigation to have some time for aeration before release of commodities. *Category : SUBSTANTIVE*
1191	180	~~7.4 Etiquetado~~	**Panama** Se solicita eliminarlo y que se incluya un párrafo que haga referencia a constancias o certificado de fumigación. *Category : SUBSTANTIVE*
1192	180	~~7.4 Etiquetado~~	**OIRSA** Se solicita eliminarlo y que se incluya un párrafo que haga referencia a constancias o certificado de fumigación. *Category : SUBSTANTIVE*
1193	181	Commodities may be labelled with treatment lot numbers or other features of identification (e.g. locations of packing and the fumigation site, dates of packing and treatment, identity of operator) allowing trace-back. The labels should be easily identifiable and placed on visible locations.	**European Union** Proposal to add at the end of this paragraph the last sentence of paragraph 160 of the draft standard on temperature treatments, for consistency between the two standards. *Category : SUBSTANTIVE*
1194	181	Commodities may be labelled with treatment lot numbers or other features of identification (e.g. locations of packing and the fumigation site, dates of packing and treatment, identity of operator) allowing trace-back. The labels should be easily identifiable and placed on visible locations.	**EPPO** Proposal to add at the end of this paragraph the last sentence of paragraph 160 of the draft standard on temperature treatments, for consistency between the two standards. *Category : SUBSTANTIVE*
1195	181	Commodities may be labelled with treatment lot numbers or other features of identification ~~(e.g. locations of packing and the fumigation site, dates of packing and treatment, identity of operator)~~ allowing trace-back.	**Australia** Remove all examples from the document as they can date the document quickly and don't add anything substantive. *Category : EDITORIAL*
1196	181	~~Los productos podrán etiquetarse con números de lote de tratamiento u otros medios de identificación (p. ej., ubicación de las instalaciones de envasado y del lugar de fumigación, fechas de envasado y de tratamiento, identidad del operador) que permitan su rastreo.~~	**Panama** Se solicita eliminarlo y que se incluya un párrafo que haga referencia a constancias o certificado de fumigación. *Category : SUBSTANTIVE*
1197	181	~~Los productos podrán etiquetarse con números de lote de tratamiento u otros medios de identificación (p. ej., ubicación de las instalaciones de envasado y del lugar de~~	**Colombia** Se requiere eliminar esta información, teniendo en cuenta que esta contempla en las declaraciones adicionales de los certificados fitosanitarios de exportación. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~fumigación, fechas de envasado y de tratamiento, identidad del operador) que permitan su rastreo.~~	
1198	181	~~Los productos podrán etiquetarse con números de lote de tratamiento u otros medios de identificación (p. ej., ubicación de las instalaciones de envasado y del lugar de fumigación, fechas de envasado y de tratamiento, identidad del operador) que permitan su rastreo.~~	**OIRSA** Se solicita eliminarlo y que se incluya un párrafo que haga referencia a constancias o certificado de fumigación. *Category : SUBSTANTIVE*
1199	182	**7.5 Monitoring ~~and auditing~~supervision**	**European Union** This section refers to supervision. More coherent with section and text below. *Category : SUBSTANTIVE*
1200	182	**7.5 Monitoring ~~and auditing~~supervision**	**EPPO** Here we refer to supervision. More coherent with section and text below *Category : SUBSTANTIVE*
1201	182	**~~8~~7.5 Monitoreo y auditoría**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1202	182	**~~7~~8.~~5~~4 Monitoreo y auditoría**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1203	183	The NPPO of the country in which the fumigation is conducted is responsible for the monitoring and auditing of fumigation entities. Continuous supervision of fumigations should not be necessary, provided treatment programmes are properly designed and can be verified to ensure a high degree of system integrity for the fumigation entity, process and commodity in question. ~~Oversight~~ The monitoring and auditing should be ~~appropriate~~ sufficient to detect and correct deficiencies promptly.	**Costa Rica** For consistency *Category : TECHNICAL*
1204	183	The NPPO of the country in which the fumigation is conducted is responsible for the monitoring and auditing of fumigation entities. Continuous supervision of fumigations should not be necessary, provided treatment programmes are properly designed and can be verified to ensure a high degree of system integrity for the fumigation entity, process and commodity in question. ~~Oversight~~ The monitoring and auditing should be ~~appropriate~~ sufficient to detect and correct deficiencies promptly.	**Peru** for consistency *Category : TECHNICAL*
1205	183	The NPPO of the country in which the fumigation is	**Argentina** For consistency

#	Para	Text	Comment
		conducted is responsible for the monitoring and auditing of fumigation entities. Continuous supervision of fumigations should not be necessary, provided treatment programmes are properly designed and can be verified to ensure a high degree of system integrity for the fumigation entity, process and commodity in question. ~~Oversight~~ The monitoring and auditing should be ~~appropriate~~ sufficient to detect and correct deficiencies promptly.	*Category : TECHNICAL*
1206	183	The NPPO of the country in which the fumigation is conducted is responsible for the monitoring and auditing of fumigation entities. Continuous supervision of fumigations should not be necessary, provided treatment programmes are properly designed and can be verified to ensure a high degree of system integrity for the fumigation entity, process and commodity in question. Oversight should be appropriate to promptly detect non-compliance and ~~correct deficiencies promptly~~take corrective actions.	**European Union** Stronger wording. *Category : EDITORIAL*
1207	183	The NPPO of the country in which the fumigation is conducted is responsible for the monitoring and auditing of fumigation entities. Continuous supervision of fumigations should not be necessary, provided treatment ~~programmes~~ protocols are properly designed and can be verified to ensure a high degree of system integrity for the fumigation entity, process and commodity in question. Oversight should be appropriate to detect and correct deficiencies promptly.	**European Union** Here the standard refers to protocols not programmes. *Category : SUBSTANTIVE*
1208	183	The NPPO of the country in which the fumigation is conducted is responsible for the monitoring and ~~auditing~~ supervision of fumigation entities. Continuous supervision of fumigations should not be necessary, provided treatment programmes are properly designed and can be verified to ensure a high degree of system integrity for the fumigation entity, process and commodity in question. Oversight should be appropriate to detect and correct deficiencies promptly.	**European Union** Here we refer to supervision. More coherent with section and text below. *Category : SUBSTANTIVE*
1209	183	The NPPO of the country in which the fumigation is conducted is responsible for the monitoring and ~~auditing~~	**EPPO** Stronger wording

#	Para	Text	Comment
		supervision of fumigation entities. Continuous supervision of fumigations should not be necessary, provided treatment ~~programmes~~ protocols are properly designed and can be verified to ensure a high degree of system integrity for the fumigation entity, process and commodity in question. Oversight should be appropriate to promptly detect non-compliance and ~~correct deficiencies promptly~~take corrective actions .	Here the standard refers to protocols not programmes Here we refer to supervision. More coherent with section and text below *Category : SUBSTANTIVE*
1210	183	The NPPO of the country in which the fumigation is conducted is responsible for the monitoring and auditing of fumigation entities. Continuous supervision of fumigations should not be necessary, provided treatment programmes are properly designed and can be verified to ensure a high degree of system integrity for the fumigation entity, process and commodity in question. ~~Oversight~~ The monitoring and auditing should be ~~appropriate~~ sufficient to detect and correct deficiencies promptly.	**Uruguay** For consistency *Category : TECHNICAL*
1211	183	The NPPO of the country in which the fumigation is conducted is responsible for the monitoring and auditing of fumigation entities. Continuous supervision of fumigations should not be necessary, provided treatment programmes are properly designed and can be verified to ensure a high degree of system integrity for the fumigation entity, process and commodity in question. ~~Oversight~~ The monitoring and auditing should be ~~appropriate~~ sufficient to detect and correct deficiencies promptly.	**COSAVE** For consistency *Category : TECHNICAL*
1212	183	La ONPF del país en el que se realiza la fumigación tiene ~~el cometido~~ la responsabilidad de monitorear y auditar a las entidades fumigadoras. No debería ser necesaria la supervisión continua de las fumigaciones, siempre que los programas de tratamiento estén correctamente diseñados y puedan verificarse para garantizar un grado alto de integridad del sistema constituido por la entidad fumigadora, el proceso y el producto de que se trate. La supervisión debería ser adecuada para detectar las deficiencias y corregirlas con prontitud.	**Panama** Traducción correcta del inglés al español. *Category : TRANSLATION*
1213	183	La ONPF del país en el que se realiza la fumigación tiene ~~el~~	**Colombia** Traducción especifica del documento de ingles al español.

#	Para	Text	Comment
		~~cometido~~ la responsabilidad de monitorear y auditar a las entidades fumigadoras. No debería ser necesaria la supervisión continua de las fumigaciones, siempre que los programas de tratamiento estén correctamente diseñados y puedan verificarse para garantizar un grado alto de integridad del sistema constituido por la entidad fumigadora, el proceso y el producto de que se trate. La supervisión debería ser adecuada para detectar las deficiencias y corregirlas con prontitud.	*Category : TRANSLATION*
1214	183	La ONPF del país en el que se realiza la fumigación tiene ~~el cometido~~ la responsabilidad de monitorear y auditar a las entidades fumigadoras. No debería ser necesaria la supervisión continua de las fumigaciones, siempre que los programas de tratamiento estén correctamente diseñados y puedan verificarse para garantizar un grado alto de integridad del sistema constituido por la entidad fumigadora, el proceso y el producto de que se trate. La supervisión debería ser adecuada para detectar las deficiencias y corregirlas con prontitud.	**OIRSA** Traducción correcta del inglés al español. *Category : TRANSLATION*
1215	184	**7.6 Requirements for treatment entities~~Compliance agreement~~**	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : TECHNICAL*
1216	184	**7.6 Requirements for treatment entities~~Compliance agreement~~**	**IPPC Regional Workshop Latin America** These compliance agreement are not applicable to fumigation treatments. This section describes the requirement for treatment entities. *Category : TECHNICAL*
1217	184	**7.6 Requirements for treatment entities~~Compliance agreement~~**	**COSAVE** A compliance agreement is not applicable to fumigation treatments. Section 7.6 describes the requirements for treatment entities *Category : TECHNICAL*
1218	184	**7.6 Requirements for treatment entities.~~Compliance agreement~~**	**Peru** A compliance agreement is not applicable to fumigation treatments. Section 7.6 describes the requirements for treatment entities *Category : TECHNICAL*
1219	184	**7.6 Requirements for treatment entities~~Compliance agreement~~**	**Brazil** A compliance agreement is not applicable to fumigation treatments. Section 7.6 describes the requirements for treatment entities *Category : TECHNICAL*
1220	184	**7.6 Requirements for treatment entities~~Compliance agreement~~**	**Argentina** A compliance agreement is not applicable to fumigation treatments. Section 7.6 describes the requirements for treatment entities *Category : TECHNICAL*

#	Para	Text	Comment
1221	184	**7.6 Requirements for treatment entities~~Compliance agreement~~**	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:09 Accepted from Latin American IPPC regional workshop *Category : TECHNICAL*
1222	184	**~~7.6~~** **~~Compliance agreement~~**	**European Union** The concepts of a compliance agreement between an NPPO and an operator is, for many countries, inconsistent with the juridical relationship between the two, and it is therefore inappropriate to seek international harmonization on the use of that concept. Furthermore all the proposed elements with the proposed agreement are already well covered in Section 7.5. It is proposed to delete section 7.6. *Category : SUBSTANTIVE*
1223	184	**~~7.6 Compliance agreement~~**	**EPPO** The concepts of a compliance agreement between an NPPO and an operator is, for many countries, inconsistent with the juridical relationship between the two, and it is therefore inappropriate to seek international harmonization on the use of that concept. Furthermore all the proposed elements with the proposed agreement are already well covered in Section 7.5. It is proposed to delete section 7.6 *Category : SUBSTANTIVE*
1224	184	**7.6 Compliance agreement**	**United States of America** Terminology: Work plan or compliance agreement? *Category : EDITORIAL*
1225	184	**7.6 Requirements for treatment entities~~Compliance agreement~~**	**Uruguay** A compliance agreement is not applicable to fumigation treatments. Section 7.6 describes the requirements for treatment entities *Category : TECHNICAL*
1226	184	**7.6 Compliance ~~agreement~~agreement or contract**	**New Zealand** New Zealand has contracts with fumigaotors *Category : EDITORIAL*
1227	184	**~~7~~8.6 Acuerdo de cumplimiento**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1228	184	**~~7~~8.~~6~~5 Acuerdo de cumplimiento**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1229	185	A ~~compliance agreement should be in place between the~~ fumigation entity ~~and~~ should fulfil the requirements specified by the NPPO of the country in which the	**Costa Rica** Accepted from IPPC Regional Workshop Latin America *Category : TECHNICAL*

#	Para	Text	Comment
		fumigation is conducted. ~~Such an agreement~~ These may include the following elements:	
1230	185	A ~~compliance agreement should be in place between the~~ fumigation entity ~~and~~ should fulfil the requirements specified by the NPPO of the country in which the fumigation is conducted. ~~Such an agreement~~ These may include the following elements:	**IPPC Regional Workshop Latin America** See comments para.184 *Category : TECHNICAL*
1231	185	A ~~compliance agreement should be in place between the~~ fumigation entity ~~and~~ should fulfil the requirements specified by the NPPO of the country in which the fumigation is conducted. ~~Such an agreement~~ These may include the following elements:	**Peru** See comment in paragraph 184 *Category : TECHNICAL*
1232	185	A ~~compliance agreement should be in place between the~~ fumigation entity ~~and~~ should fulfil the requirements specified by the NPPO of the country in which the fumigation is conducted. ~~Such an agreement~~ These may include the following elements:	**Brazil** See comment in paragraph 184 *Category : TECHNICAL*
1233	185	A ~~compliance agreement should be in place between the~~ fumigation entity ~~and~~ should fulfil the requirements specified by the NPPO of the country in which the fumigation is conducted. ~~Such an agreement~~ These may include the following elements:	**Argentina** See comment in paragraph 184 *Category : TECHNICAL*
1234	185	A ~~compliance agreement should be in place between the~~ fumigation entity ~~and~~ should fulfil the requirements specified by the NPPO of the country in which the fumigation is conducted. ~~Such an agreement~~ These may include the following elements:	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:11 Accepted from Latin American IPPC regional workshop *Category : TECHNICAL*
1235	185	~~A compliance agreement should be in place between the fumigation entity and the NPPO of the country in which the fumigation is conducted. Such an agreement may include the following elements:~~	**European Union** It is proposed to delete section 7.6 cf previous EU comment on par. 184 *Category : SUBSTANTIVE*
1236	185	~~A compliance agreement should be in place between the fumigation entity and the NPPO of the country in which the fumigation is conducted. Such an agreement may include the following elements:~~	**EPPO** It is proposed to delete section 7.6 cf previous EPPO comment on par. 184 *Category : SUBSTANTIVE*
1237	185	A ~~compliance agreement should be in place between the~~	**Uruguay** See comment in paragraph 184

#	Para	Text	Comment
		fumigation entity ~~and~~ should fulfil the requirements specified by the NPPO of the country in which the fumigation is conducted. ~~Such an agreement~~ These may include the following elements:	*Category : TECHNICAL*
1238	185	A compliance agreement or contract should be in place between the fumigation entity and the NPPO of the country in which the fumigation is conducted. Such an agreement may include the following elements:	**New Zealand** as 184 *Category : EDITORIAL*
1239	185	A ~~compliance agreement should be in place between the~~ fumigation entity ~~and~~ should fulfil the requirements specified by the NPPO of the country in which the fumigation is conducted. ~~Such an agreement~~ These may include the following elements:	**COSAVE** See comments para.184 *Category : TECHNICAL*
1240	185	~~Debería~~ Debe existir un acuerdo de cumplimiento entre la entidad fumigadora y la ONPF del país en el que se realiza la fumigación. Este acuerdo ~~podrá~~ debe incluir los elementos siguientes:	**Panama** Se reafirma la obligación de la ONPF *Category : SUBSTANTIVE*
1241	185	~~Debería~~ Debe existir un acuerdo de cumplimiento entre la entidad fumigadora y la ONPF del país en el que se realiza la fumigación. Este acuerdo ~~podrá~~ debe incluir los elementos siguientes:	**OIRSA** Se reafirma la obligación de la ONPF. *Category : SUBSTANTIVE*
1242	186	~~authorization of the fumigation entity by the NPPO of the country in which the fumigation is conducted~~	**European Union** It is proposed to delete section 7.6. cf previous EU comment on par. 184. *Category : SUBSTANTIVE*
1243	186	~~authorization of the fumigation entity by the NPPO of the country in which the fumigation is conducted~~	**EPPO** It is proposed to delete section 7.6 cf previous EPPO comment on par. 184 *Category : SUBSTANTIVE*
1244	186	authorization of the fumigation entity by the NPPO of the country in which the fumigation is conducted	**Nepal** What about to add following points as in the case of Temperature Treatment - "approval of the facility by the NPPO of the country in which the facility is located" *Category : EDITORIAL*
1245	187	~~the monitoring programme to be administered by the NPPO of the country in which the fumigation is conducted~~	**European Union** It is proposed to delete section 7.6. cf previous EU comment on par. 184. *Category : SUBSTANTIVE*
1246	187	~~the monitoring programme to be administered by the NPPO~~	**EPPO** It is proposed to delete section 7.6

#	Para	Text	Comment
		~~of the country in which the fumigation is conducted~~	cf previous EPPO comment on par. 184 *Category : SUBSTANTIVE*
1247	188	~~audit provisions~~	**European Union** It is proposed to delete section 7.6. cf previous EU comment on par. 184. *Category : SUBSTANTIVE*
1248	188	~~audit provisions~~	**EPPO** It is proposed to delete section 7.6 cf previous EPPO comment on par. 184 *Category : SUBSTANTIVE*
1249	189	free access ~~for the NPPO of the country in which the fumigation is conducted~~ to documentation and records of the fumigation entity	**COSAVE** To avoid repetition with para. 185 *Category : EDITORIAL*
1250	189	free access ~~for the NPPO of the country in which the fumigation is conducted~~ to documentation and records of the fumigation entity	**Peru** To avoid repetition with paragraph 185 *Category : EDITORIAL*
1251	189	free access ~~for the NPPO of the country in which the fumigation is conducted~~ to documentation and records of the fumigation entity	**Brazil** To avoid repetition with paragraph 185 *Category : EDITORIAL*
1252	189	free access ~~for the NPPO of the country in which the fumigation is conducted~~ to documentation and records of the fumigation entity	**Argentina** To avoid repetition with paragraph 185 *Category : EDITORIAL*
1253	189	~~access for the NPPO of the country in which the fumigation is conducted to documentation and records of the fumigation entity~~	**European Union** It is proposed to delete section 7.6. cf previous EU comment on par. 184. *Category : SUBSTANTIVE*
1254	189	~~access for the NPPO of the country in which the fumigation is conducted to documentation and records of the fumigation entity~~	**EPPO** It is proposed to delete section 7.6 cf previous EPPO comment on par. 184 *Category : SUBSTANTIVE*
1255	189	free access ~~for the NPPO of the country in which the fumigation is conducted~~ to documentation and records of the fumigation entity	**Uruguay** To avoid repetition with paragraph 185 *Category : EDITORIAL*
1256	190	corrective action to be taken in cases of non-compliance. - proof of certification to apply and/or work with the class of fumigant being used.	**Antigua and Barbuda** *Category : SUBSTANTIVE*
1257	190	contingency plan and corrective action to be taken in cases of non-compliance.	**IPPC Regional Workshop Asia** To include " contingency plan" to be consistent with remaining para i.e 64 & 199. **APPPC** agreed by APPPC

#	Para	Text	Comment
			Nepal Support and agree with Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : SUBSTANTIVE*
1258	190	~~corrective action to be taken in cases of non-compliance.~~	**European Union** It is proposed to delete section 7.6. cf previous EU comment on par. 184. *Category : SUBSTANTIVE*
1259	190	~~corrective action to be taken in cases of non-compliance.~~	**EPPO** It is proposed to delete section 7.6 cf previous EPPO comment on par. 184 *Category : SUBSTANTIVE*
1260	190	corrective action to be taken in cases of non-compliance.	**Barbados** This should be part of the NPPO registration process as it would show that the entity has undergone the necessary training to use the fumigant (which is usually done by the manufacturer in most cases). *Category : SUBSTANTIVE*
1261	190	corrective action to be taken in cases of non-compliance. - the fumigation entity should/shall produce proof that it has been certified to use the product used during the fumigation process.	**Barbados** *Category : SUBSTANTIVE*
1262	190	~~corrective action to be taken in cases of non-compliance.~~contingency plan and corrective action to be taken in cases of non-compliance.	**Thailand** Contingency plan and corrective action should be taken together as shown in section 3 and 8.1. *Category : SUBSTANTIVE*
1263	191	~~8~~9. **Documentación**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1264	191	~~8~~9. **Documentación**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1265	192	The NPPO of the country in which the fumigation is conducted is responsible for monitoring the record keeping and the documentation by the fumigation entities, and for ensuring that records are available to concerned parties. The format of the fumigation certificate should be uniform.	**Nigeria** *Category : SUBSTANTIVE*
1266	192	The NPPO of the country in which the fumigation is conducted is responsible for monitoring ~~the~~ record keeping and ~~the documentation by the fumigation entities, and for~~	**European Union** For consistency with the draft standard on temperature treatments following first consultation. *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~ensuring that records are~~ documentation. This information should be available to concerned parties. Trace-back capability should be required.	
1267	192	The NPPO of the country in which the fumigation is conducted is responsible for monitoring ~~the~~ record keeping and ~~the documentation by the fumigation entities, and for ensuring that records are~~ documentation. This information should be available to concerned parties. Trace-back capability is essential.	**EPPO** For consistency with the draft standard on temperature treatments following first consultation. *Category : SUBSTANTIVE*
1268	192	La ONPF del país en el que se realiza la fumigación tiene ~~el cometido~~ la responsabilidad de monitorear el mantenimiento de registros y la documentación por parte de las entidades fumigadoras y de garantizar que las partes interesadas puedan acceder a los registros.	**Panama** Traducción correcta del inglés al español. *Category : TRANSLATION*
1269	192	La ONPF del país en el que se realiza la fumigación tiene ~~el cometido~~ la responsabilidad de monitorear el mantenimiento de registros y la documentación por parte de las entidades fumigadoras y de garantizar que las partes interesadas puedan acceder a los registros.	**Colombia** Traducción especifica del documento de ingles al español. *Category : TRANSLATION*
1270	192	La ONPF del país en el que se realiza la fumigación tiene ~~el cometido~~ la responsabilidad de monitorear el mantenimiento de registros y la documentación por parte de las entidades fumigadoras y de garantizar que las partes interesadas puedan acceder a los registros.	**OIRSA** Traducción correcta del inglés al español. *Category : TRANSLATION*
1271	193	~~**8.1 Documentation of procedures**~~	**United States of America** Suggest to delete this section: NPPO requirements differ and may use only a few of items or add items. The items are examples and are not mandated for NPPO. *Category : TECHNICAL*
1272	193	~~9~~**8.1 Documentación de los procedimientos**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1273	193	~~**8**~~**9.1 Documentación de los procedimientos**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1274	194	Procedures should be documented to ensure that commodities are fumigated in accordance with the	**European Union** For clarity.

#	Para	Text	Comment
		fumigation schedule and this standard, as required. Process controls and operational parameters should be established, documenting the details necessary for a specific authorization of a fumigation entity. Calibration and quality control procedures should be documented by the fumigation entity. As a minimum, a written ~~procedure~~ document on procedures should include the following:	*Category : EDITORIAL*
1275	194	Procedures should be documented to ensure that commodities are fumigated in accordance with the fumigation schedule and this standard, as required. Process controls and operational parameters should be established, documenting the details necessary for a specific authorization of a fumigation entity. Calibration and quality control procedures should be documented by the fumigation entity. As a minimum, a written ~~procedure~~ document on procedures should include the following:	**EPPO** For clarity *Category : EDITORIAL*
1276	194	~~Procedures should be documented to ensure that commodities are fumigated in accordance with the fumigation schedule and this standard, as required. Process controls and operational parameters should be established, documenting the details necessary for a specific authorization of a fumigation entity. Calibration and quality control procedures should be documented by the entity. As a minimum, a written procedure should include the following:~~	**United States of America** See United States comment in paragraph 193 *Category : TECHNICAL*
1277	195	~~commodity handling procedures before, during and after fumigation~~	**United States of America** See United States comment in paragraph 193 *Category : TECHNICAL*
1278	196	~~orientation and configuration of the commodity during fumigation~~	**United States of America** See United States comment in paragraph 193 *Category : TECHNICAL*
1279	197	~~critical process parameters and the means for their monitoring~~	**United States of America** See United States comment in paragraph 193 *Category : TECHNICAL*
1280	198	records of temperature sensor calibrations and, where appropriate, calibration records for humidity sensors or moisture meters	**Costa Rica** "moisture meters" should be translated into Spanish as "medidores de humedad". See comment in paragraph 97 *Category : TRANSLATION*
1281	198	records of temperature sensor calibrations and, where appropriate, calibration records for humidity sensors or	**COSAVE** "moisture meters" should be translated into Spanish as "medidores de humedad". See comment in paragraph 97

#	Para	Text	Comment
		moisture meters	*Category : TRANSLATION*
1282	198	records of temperature sensor calibrations and, where appropriate, calibration records for humidity sensors or moisture meters	**Peru** "moisture meters" should be translated into Spanish as "medidores de humedad". See comment in paragraph 97 *Category : TRANSLATION*
1283	198	~~records~~ methods of equipment calibrations: e.g. scales, temperature ~~sensor calibrations~~ sensors and, where appropriate, ~~calibration records~~ for humidity sensors or moisture ~~meters~~meters	**Ozone Secretariat** All the measuring equipment used should be calibrated, the need to record is in 8.2. *Category : TECHNICAL*
1284	198	records of temperature sensor calibrations and, where appropriate, calibration records for humidity sensors or moisture meters	**Argentina** "moisture meters" should be translated into Spanish as "medidores de humedad". See comment in paragraph 97 *Category : TRANSLATION*
1285	198	records of temperature and gas concentration sensor calibrations and, where appropriate, calibration records for humidity sensors or moisture meters	**European Union** The procedure for gas concentration calibration was forgotten (see ISPM 15 and paragraph 87). *Category : TECHNICAL*
1286	198	~~records of~~ temperature ~~sensor~~ calibrations ~~and~~and recording, where appropriate, calibration ~~records~~ and recording for humidity sensors or moisture meters	**European Union** For consistency with the draft standard on temperature treatments. *Category : SUBSTANTIVE*
1287	198	~~records of~~ temperature ~~sensor calibrations~~ and gas concentration calibration and recording and, where appropriate, calibration ~~records~~ and recording for humidity sensors or moisture meters	**EPPO** For consistency with the draft standard on temperature treatments. The procedure for gas concentration calibration was forgotten (see ISPM 15 and paragraph 87). *Category : TECHNICAL*
1288	198	~~records of temperature sensor calibrations and, where appropriate, calibration records for humidity sensors or moisture meters~~	**United States of America** See United States comment in paragraph 193 *Category : TECHNICAL*
1289	198	records of temperature sensor calibrations and, where appropriate, calibration records for humidity sensors or moisture meters	**Uruguay** "moisture meters" should be translated into Spanish as "medidores de humedad". See comment in paragraph 97 *Category : TRANSLATION*
1290	198	~~records~~ methods of equipment calibrations: e.g. scales, temperature ~~sensor calibrations~~ sensors and, where appropriate, ~~calibration records~~ for humidity sensors or moisture meters	**Australia** All the measuring equipment used should be calibrated, the need to record is in 8.2. *Category : TECHNICAL*
1291	199	contingency plans and corrective actions to be taken in the event of fumigation failure or problems with critical treatment processes - plans for handling accidents and emergencies	**Antigua and Barbuda** *Category : SUBSTANTIVE*
1292	199	contingency plans and corrective actions to be taken in the	**Guyana**

#	Para	Text	Comment
		event of fumigation failure or problems with critical treatment processes	Consider including another bullet point on "provisions for handling accidents and emergencies" *Category : SUBSTANTIVE*
1293	199	contingency plans and corrective actions to be taken in the event of fumigation failure or problems with critical treatment processes - provisions for handling accidents and emergencies	**Saint Vincent and The Grenadines** Consider including another bullet point on "provisions for handling accidents and emergencies" *Category : SUBSTANTIVE*
1294	199	contingency plans and corrective actions to be taken in the event of fumigation failure or problems with critical treatment processes	**Trinidad and Tobago** Consider including another bullet point on "provisions for handling accidents and emergencies" *Category : SUBSTANTIVE*
1295	199	~~contingency plans and corrective actions to be taken in the event of fumigation failure or problems with critical treatment processes~~	**United States of America** See United States comment in paragraph 193 *Category : TECHNICAL*
1296	199	contingency plans and corrective actions to be taken in the event of fumigation failure or problems with critical treatment processes	**Jamaica** Consider including another bullet point on "provisions for handling accidents and emergencies" *Category : SUBSTANTIVE*
1297	199	contingency plans and corrective actions to be taken in the event of fumigation failure or problems with critical treatment processes - provisions for handling accidents and emergencies	**IPPC Regional Workshop Caribbean** Consider including another bullet point on "provisions for handling accidents and emergencies" *Category : SUBSTANTIVE*
1298	200	~~procedures for handling rejected lots~~	**United States of America** See United States comment in paragraph 193 *Category : TECHNICAL*
1299	201	staff ~~training~~training and skills	**EPPO** Important element to be added **Russian Federation** I agree *Category : SUBSTANTIVE*
1300	201	staff ~~training~~training and skills	**European Union** Important element to be added. *Category : SUBSTANTIVE*
1301	201	~~staff training~~	**United States of America** See United States comment in paragraph 193 *Category : TECHNICAL*
1302	202	~~record keeping and documentation requirements.~~	**United States of America** See United States comment in paragraph 193

#	Para	Text	Comment
			Category : TECHNICAL
1303	202	record keeping and documentation requirements.	**Jamaica** Add [203] Provisions for handling accidents and emergencies. *Category : SUBSTANTIVE*
1304	203	**8.2 Record keeping**	**Ozone Secretariat** "- The lowest of air and commodity temperature - Who carried out the treatment - A certificate is normally produced with the relevant treatment parameters listed as having been met". Only the relevant temperture needs to be recorded i.e. the lowest fruit flesh temperture is sufficient The technician responsible for the fumigation needs to be identified and recorded on the fumigation certificate. *Category : SUBSTANTIVE*
1305	203	~~8~~9.2 **Mantenimiento de registros**	**Panama** 89.3 Documentación por la ONPF Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1306	203	~~8~~9.2 **Mantenimiento de registros**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1307	204	Fumigation entities should keep records. These records should be made available to the NPPO of the country in which the fumigation is conducted or initiated for auditing and verification purposes or trace-back.	**European Union** Missing word. *Category : EDITORIAL*
1308	204	Fumigation entities should keep records. These records should be made available to the NPPO of the country in which the fumigation is conducted or initiated for auditing and verification purposes or trace-back.	**EPPO** Missing word. *Category : EDITORIAL*
1309	204	Fumigation entities should keep records. These records should be available to the NPPO of the country in which the fumigation is conducted or initiated for auditing and verification purposes or trace-back.	**United States of America** Record keeping is dependent on NPPO and groups within NPPO, such as imports and exports. *Category : TECHNICAL*
1310	205	Appropriate records for fumigation as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. Information that should be recorded includes: - name of fumigant used	**IPPC Regional Workshop Asia** To include the name of fumigant used. **APPPC** agreed by APPPC **Malaysia** Malaysia agreed with APPPC **China** China agreed to this regional comments. **Thailand**

#	Para	Text	Comment
			Thailand agree with APPPC comment. **Korea, Republic of** Republic of Korea agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Japan** Japan support regional comment. **Viet Nam** Vietnam agreed with this APPPC comment. *Category : SUBSTANTIVE*
1311	205	Appropriate records for fumigation treatment as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. Information that should be recorded includes:	**Peru** For consistency *Category : TECHNICAL*
1312	205	Appropriate records for fumigation treatment as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. Information that should be recorded includes:	**Brazil** For consistency *Category : TECHNICAL*
1313	205	Appropriate records for fumigation treatment as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. Information that should be recorded includes:	**Argentina** For consistency *Category : TECHNICAL*
1314	205	Appropriate records for fumigation as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. Information that should be recorded includes: - name of fumigant	**Japan** Information of the name of fumigant used should be kept for records for fumigation. *Category : SUBSTANTIVE*
1315	205	Appropriate records for fumigation as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep ~~all~~ appropriate records for ~~every treatment~~each treatment application. Information that	**European Union** 1) Recording requirements have to be feasible and useful. For example the place of production (paragraph 211) is not always available for grain in bulk. 2) For consistency with the draft standard on temperature treatments.

#	Para	Text	Comment
		~~should~~ may be required to be recorded includes:	*Category : SUBSTANTIVE*
1316	205	Appropriate records for fumigation as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. Information that should be recorded ~~includes~~includes data on:	**European Union** Improvement. *Category : EDITORIAL*
1317	205	Appropriate records for fumigation as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep ~~all~~ appropriate records for ~~every treatment~~each treatment application. Information that ~~should~~ may be required to be recorded ~~includes~~includes data on:	**EPPO** improvement 1) Recording requirements have to be feasible and useful. For example the place of production (paragraph 211) is not always available for grain in bulk 2) For consistency with the draft standard on temperature treatments. *Category : SUBSTANTIVE*
1318	205	Appropriate records for fumigation as a phytosanitary measure should be kept by the fumigation entity for ~~at least one year~~ a period specified by the NPPO to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. Information that should be recorded includes:	**India** *Category : SUBSTANTIVE*
1319	205	Appropriate records for fumigation as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. ~~Information~~ Examples of information that ~~should~~ could be recorded ~~includes~~include:	**United States of America** Dependent on NPPO. Should be listed as for example and a statement that the NPPO is not required to use all of the listed items *Category : TECHNICAL*
1320	205	Appropriate records for fumigation treatment as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. Information that should be recorded includes:	**Uruguay** For consistency *Category : TECHNICAL*
1321	205	Appropriate records for fumigation as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. Information that should be recorded includes:	**Australia** There is a difference between general administrative requirements and individual fumigation requirements. Separate general administrative requirements from individual fumigation requirements to make it into two separate lists:

#	Para	Text	Comment
			General administrative requirements: -identification of enclosure and fumigation entity and individual performing the fumigation. -equipment calibration records Individual fumigation requirements: -fumigated target of commodity -fumigation lot number -lot size and volume, including number of articles or packages -Identifying markings or characteristics -Date of fumigation -Any observed deviation from the treatment schedule -Air and commodity temperature records -Fumigant dose and concentration records -Fumigant volumes (dose rate) calculated and added throughout fumigation. *Category : TECHNICAL*
1322	205	Appropriate records for fumigation as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every ~~treatment~~treatment on each commodity. Information that should be recorded includes:	**IPPC Regional Workshop Near East** the addition is to keep the record on each treatment or combined treatments that are applied on the commodity to be consistent with previous notion that more than one treatment can be applied on the same commodity (i.e. concurrent combination treatments) *Category : SUBSTANTIVE*
1323	205	Appropriate records for fumigation treatment as a phytosanitary measure should be kept by the fumigation entity for at least one year to enable the trace-back of treated lots. The fumigation entity should keep all records for every treatment. Information that should be recorded includes:	**COSAVE** For consistency *Category : TECHNICAL*
1324	207	enclosure leakage testing records (as appropriate)	**Costa Rica** "leakage" should be translated into Spanish as "fuga" *Category : TRANSLATION*
1325	207	enclosure leakage testing records (as appropriate)	**COSAVE** "leakage" should be translated into Spanish as "fuga" *Category : TRANSLATION*
1326	207	enclosure leakage testing records (as appropriate)	**Peru** "leakage" should be translated into Spanish as "fuga" *Category : TRANSLATION*
1327	207	enclosure leakage testing records (as appropriate)	**Brazil** "leakage" should be translated into Spanish as "fuga" *Category : TRANSLATION*
1328	207	enclosure leakage testing records (as appropriate)	**Argentina** "leakage" should be translated into Spanish as "fuga" *Category : TRANSLATION*
1329	207	enclosure leakage testing records (as appropriate)	**Uruguay** "leakage" should be translated into Spanish as "fuga"

#	Para	Text	Comment
			Category : TRANSLATION
1330	207	enclosure leakage testing records (as appropriate)	**Australia** Consider removing this line - these records are not required. *Category : TECHNICAL*
1331	209	Fumigated target of ~~commodity fumigated~~commodity	**Australia** This is to distinguish between a commodity and the specific target of fumigation. *Category : TECHNICAL*
1332	210	target regulated pest	**Guyana** For consistency, remove the word 'regulated' *Category : SUBSTANTIVE*
1333	210	target ~~regulated -~~ pest	**Saint Vincent and The Grenadines** For consistency, remove the word 'regulated' *Category : SUBSTANTIVE*
1334	210	target regulated pest	**Trinidad and Tobago** For consistency, remove the word 'regulated' *Category : SUBSTANTIVE*
1335	210	~~target regulated pest~~	**Australia** Target regulated pest may not be known until all the destination countries provide the list of targeted pests. Fumigation must be aimed at managing all stored product insects on the export pathway. *Category : TECHNICAL*
1336	210	target ~~regulated~~ pest	**IPPC Regional Workshop Caribbean** For consistency, remove the word 'regulated' f *Category : EDITORIAL*
1337	210	target ~~regulated~~ regulated pest	**Jamaica** remove regulated for consistency. *Category : SUBSTANTIVE*
1338	211	~~packer, grower and place of production of the commodity~~	**Australia** These may not be known at time of fumigation are not required *Category : TECHNICAL*
1339	215	date of ~~fumigation~~fumigation	**India** Temperature record *Category : TECHNICAL*
1340	216	cualquier desviación observada respecto ~~del~~ al protocolo de tratamiento;	**Cuba** *Category : EDITORIAL*
1341	217	the lowest air and commodity ~~temperature records~~temperature - who carried out the treatment - a certificate isnormally produced with the relevant treatment parameters listed as having been met.	**New Zealand** Only the relevant temperture needs to be recorded i.e. the lowest fruit flesh temperture is sufficient The technical responsible for the fumigation needs to be identified and recorded. *Category : TECHNICAL*
1342	220	~~8~~9.3 **Documentación por la ONPF**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1343	220	~~8~~9.3 **Documentación por la ONPF**	**OIRSA**

#	Para	Text	Comment
			Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1344	221	All NPPO procedures should be appropriately documented and records, including those of monitoring inspections made and phytosanitary certificates issued, should be maintained for at least one year. In cases of non-compliance or new or unexpected phytosanitary situations, documentation should be made available on request as described in ISPM 13 (*Guidelines for the notification of non-compliance and emergency action*).	**European Union** Important modification, and for consistency with other ISPMs. *Category : SUBSTANTIVE*
1345	221	All NPPO procedures should be appropriately documented and records, including those of monitoring inspections made and phytosanitary certificates issued, should be maintained for at least one year. In cases of non-compliance or new or unexpected phytosanitary situations, documentation should be made available on request as described in ISPM 13 (*Guidelines for the notification of non-compliance and emergency action*).	**EPPO** Important modification, and for consistency with other ISPMs *Category : SUBSTANTIVE*
1346	221	All NPPO procedures should be appropriately documented and records, including those of monitoring inspections made and phytosanitary certificates issued, should be maintained for at least one year. In cases of non-compliance or new or unexpected phytosanitary situations, documentation should be made available as described in ISPM 13 (*Guidelines for the notification of non-compliance and emergency action*).	**United States of America** First sentence: Dependent on NPPO and should not have a minimum storage time. Why is one year determined as the minimum? *Category : TECHNICAL*
1347	221	All NPPO procedures should be appropriately documented and ~~records~~recorded, including those of monitoring inspections made and phytosanitary certificates issued, should be maintained for at least one year. In cases of non-compliance or new or unexpected phytosanitary situations, documentation should be made available as described in ISPM 13 (*Guidelines for the notification of non-compliance and emergency action*).	**Philippines** *Category : EDITORIAL*
1348	221	~~Todos los procedimientos de la ONPF deberían documentarse adecuadamente, y los registros, incluidos los correspondientes a las inspecciones de monitoreo realizadas~~	**Panama** Esta documentación que debe resguardar la ONPF es en función al procedimiento de fumigación y no a lo que se derive del mismo. *Category : TECHNICAL*

#	Para	Text	Comment
		~~y los certificados fitosanitarios emitidos, deberían conservarse durante al menos un año. En los casos de incumplimiento o en situaciones fitosanitarias nuevas o imprevistas, debería proporcionarse la documentación pertinente, según se describe en la NIMF 13 (*Directrices para la notificación de incumplimiento y acción de emergencia*).~~Todos los procedimientos de la ONPF deberían documentarse adecuadamente, y los registros, incluidos los correspondientes a las inspecciones de monitoreo realizadas, deberían conservarse durante al menos un año.	
1349	221	Todos los procedimientos de la ONPF deberían documentarse adecuadamente, y los registros, incluidos los correspondientes a las inspecciones de monitoreo ~~realizadas y los certificados fitosanitarios emitidos~~realizadas, deberían conservarse durante al menos un año~~. En los casos de incumplimiento o en situaciones fitosanitarias nuevas o imprevistas, debería proporcionarse la documentación pertinente, según se describe en la NIMF 13 (.*Directrices para la notificación de incumplimiento y acción de emergencia*).~~	**OIRSA** Esta documentación que debe resguardar la ONPF es en función al procedimiento de fumigación y no a lo que se derive del mismo. *Category : TECHNICAL*
1350	222	~~9~~10. **Inspección**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1351	222	~~9~~10. **Inspección**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1352	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live non-target pests are found, the NPPO should consider if their survival would indicate a treatment failure.	**Costa Rica** Second sentence of this paragraph should be translated into Spanish as "Cuando se detectan plagas vivas distintas de la plaga objetivo, la ONPF debería considerar si su supervivencia es indicativa de la ineficacia del tratamiento" *Category : TRANSLATION*
1353	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live non-target pests are found, the NPPO should consider if their survival would indicate a treatment failure.	**Peru** Second sentence of this paragraph should be translated into Spanish as "Cuando se detectan plagas vivas distintas de la plaga objetivo, la ONPF debería considerar si su supervivencia es indicativa de la ineficacia del tratamiento" *Category : TRANSLATION*
1354	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live non-target	**Brazil** Second sentence of this paragraph should be translated into Spanish as "Cuando se detectan plagas vivas distintas de la plaga objetivo, la ONPF debería considerar si su

#	Para	Text	Comment
		pests are found, the NPPO should consider if their survival would indicate a treatment failure.	supervivencia es indicativa de la ineficacia del tratamiento" *Category : TRANSLATION*
1355	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live non-target pests are found, the NPPO should consider if their survival would indicate a treatment failure.	**Argentina** Second sentence of this paragraph should be translated into Spanish as "Cuando se detectan plagas vivas distintas de la plaga objetivo, la ONPF debería considerar si su supervivencia es indicativa de la ineficacia del tratamiento" *Category : TRANSLATION*
1356	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live ~~non-target~~ target pests are found, the NPPO should consider if their survival would indicate a treatment failure, infestation after treatment or other factors.	**Japan** Determination if the treatment is successful should be judged from survival of targeted pests. Even though live target pest is detected, the cause of the detection is not always failure of the treatment. There is the possibility of infestation after treatment or fraudulent activities. *Category : SUBSTANTIVE*
1357	223	Inspection ~~is~~ should be carried out by the NPPO of the exporting country and may be carried out by the NPPO of the importing country to determine compliance with phytosanitary import requirements. Where live non-target pests are found, the NPPO should consider if their survival would indicate a treatment failure.	**European Union** Expressing requirements, with the appropriate level of obligation. *Category : TECHNICAL*
1358	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live non-target pests are ~~found~~found after fumigation, the NPPO should consider if their survival would indicate a treatment failure.	**European Union** More precise. *Category : EDITORIAL*
1359	223	Inspection ~~is~~ should be carried out by the NPPO of the exporting country and may be carried out by the NPPO of the importing country to determine compliance with phytosanitary import requirements. Where live non-target pests are ~~found~~found after fumigation, the NPPO should consider if their survival would indicate a treatment failure.	**EPPO** More precise. Expressing requirements, with the appropriate level of obligation. *Category : TECHNICAL*
1360	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live non-target pests are found, the NPPO should consider if their survival would indicate a treatment failure.	**Kenya** What happens if it is found that the live non target pests are important and require treatment. Proposal; conduct inspection prior to decision on fumigant to be used, so that pests are expected post inspection if the treatment was done correctly. *Category : SUBSTANTIVE*
1361	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live non-target pests are found, the NPPO should consider if their survival would indicate a treatment failure.	**Uruguay** Second sentence of this paragraph should be translated into Spanish as "Cuando se detectan plagas vivas distintas de la plaga objetivo, la ONPF debería considerar si su supervivencia es indicativa de la ineficacia del tratamiento" *Category : TRANSLATION*
1362	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live ~~non-target~~	**Japan** **Thailand**

#	Para	Text	Comment
		target pests are found, the NPPO should consider if their survival would indicate a treatment failure.	Thailand would like to support this comment *Category : SUBSTANTIVE*
1363	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live non-target pests are found, the NPPO should ~~consider~~ determine if their survival would indicate a treatment ~~failure~~failure or re-infestation.	**Philippines** *Category : EDITORIAL*
1364	223	Inspection is carried out to determine compliance with phytosanitary import requirements. Where live non-target pests are found, the NPPO should consider if their survival would indicate a treatment failure.	**COSAVE** Second sentence of this para. should be translated into Spanish as"Cuando se detectan plagas vivas distintas de la plaga objetivo, la ONPF debería considerar si su supervivencia es indicativa de la ineficacia del tratamiento" *Category : TRANSLATION*
1365	223	La ~~finalidad de~~ Inspección la ~~inspección es comprobar el cumplimiento de los requisitos fitosanitarios de importación. Cuando~~ realiza la ONPF del país donde se ~~detecten plagas vivas distintas de~~ realice el tratamiento con la ~~plaga objetivo,~~ finalidad de comprobar la ~~ONPF debería considerar si su supervivencia es indicativa~~ eficacia de la ~~ineficacia del tratamiento~~fumigación.	**Panama** Esta inspección debe de estar enfocada al proceso de fumigación, y verificar si el mismo fue exitoso o fallido. *Category : TECHNICAL*
1366	223	La ~~finalidad de la~~ inspección ~~es comprobar el cumplimiento de los requisitos fitosanitarios de importación. Cuando se detecten plagas vivas distintas de~~ la ~~plaga objetivo,~~ realiza la ONPF ~~debería considerar si su supervivencia es indicativa~~ del país donde se realice el tratamiento con la finalidad de comprobar la ~~ineficacia del tratamiento~~eficacia de la fumigación.	**OIRSA** Esta inspección debe de estar enfocada al proceso de fumigación, y verificar si el mismo fue exitoso o fallido. *Category : TECHNICAL*
1367	224	**10. Responsibilities~~Authority~~**	**European Union** Title more appropriate for this section. *Category : TECHNICAL*
1368	224	**10~~.~~. Responsibilities ~~Authority~~**	**EPPO** Title more appropriate for this section *Category : TECHNICAL*
1369	224	**~~10~~11. Autoridad**	**Panama** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1370	224	**~~10~~11. Autoridad**	**OIRSA** Para brindar un orden y jerarquía a cada ítem o tema, según su importancia y a las modificaciones antes indicadas. *Category : EDITORIAL*
1371	225	The NPPO of the country in which the fumigation is	**European Union** 1) Plural because of "as phytosanitary measures".

#	Para	Text	Comment
		conducted or initiated is responsible for the evaluation, approval and monitoring of the application of ~~fumigation~~ fumigations as phytosanitary measures, including those performed by authorized fumigation entities. However, when treatments are conducted or completed during transport, the NPPO of the importing country is responsible for verifying if the treatment ~~requirement has~~ requirements have been met.	2) Plural more appropriate as there are several requirements. *Category : EDITORIAL*
1372	225	The NPPO of the country in which the fumigation is conducted or initiated is responsible for the evaluation, approval and monitoring of the application of ~~fumigation~~ fumigations as phytosanitary measures, including those performed by authorized fumigation entities. However, when treatments are conducted or completed during transport, the NPPO of the importing country is responsible for verifying if the treatment ~~requirement has~~ requirements have been met.	**EPPO** 1) Plural because of "as phytosanitary measures" . 2) Plural more appropriate as there are several requirements. *Category : EDITORIAL*
1373	225	The NPPO of the country in which the fumigation is conducted or initiated is responsible for the evaluation, approval and monitoring of the application of fumigation as phytosanitary measures, including those performed by authorized fumigation entities. However, when treatments are conducted or completed during transport, the NPPO of the importing country and exporting countries should agree prior to export which NPPO is responsible for verifying if the treatment requirement has been met.	**New Zealand** to ensure clarity between NPPOs *Category : EDITORIAL*
1374	225	The NPPO of the country in which the fumigation is conducted or initiated is responsible for the evaluation, approval and monitoring of the application of fumigation as phytosanitary measures, including those performed by authorized fumigation entities. However, when treatments are conducted or completed during transport, the NPPO of the importing country is responsible for verifying if the treatment requirement has been met~~.~~. При этом НОКЗР страны-экспортёра должна договориться с НОКЗР страны-импортёра о возможности проведения соответствующей проверки.	**Belarus** *Category : SUBSTANTIVE*

#	Para	Text	Comment
1375	225	The NPPO of the country in which the fumigation is conducted or initiated is responsible for the evaluation, approval and monitoring of the application of fumigation as a phytosanitary ~~measures~~measure, including those performed by authorized fumigation entities. However, when treatments are conducted or completed during transport, the NPPO of the importing country is responsible for verifying if the treatment requirement has been met.	**IPPC Regional Workshop Near East** Better english *Category : EDITORIAL*
1376	225	The NPPO of the country in which the fumigation is conducted or initiated is responsible for the evaluation, approval and monitoring of the application of fumigation as phytosanitary measures, including those performed by authorized fumigation entities. ~~However, when treatments are conducted or completed during transport, the NPPO of the importing country is responsible for verifying if the treatment requirement has been met.~~	**Philippines** In transit fumigation should not be allowed due to safety reasons *Category : SUBSTANTIVE*
1377	225	La ONPF del país en el que se realiza o se inicia la fumigación tiene ~~el cometido~~ la responsabilidad de evaluar, aprobar y monitorear la aplicación de la fumigación como medida fitosanitaria, incluidas las fumigaciones realizadas por entidades fumigadoras autorizadas. Sin embargo, cuando los tratamientos se realicen o finalicen durante el transporte, la ONPF del país importador tiene ~~el cometido~~ la responsabilidad de verificar si se ha cumplido el tratamiento requerido.	**Panama** Uso correcto de términos. *Category : EDITORIAL*
1378	225	La ONPF del país en el que se realiza o se inicia la fumigación tiene ~~el cometido~~ la responsabilidad de evaluar, aprobar y monitorear la aplicación de la fumigación como medida fitosanitaria, incluidas las fumigaciones realizadas por entidades fumigadoras autorizadas. Sin embargo, cuando los tratamientos se realicen o finalicen durante el transporte, la ONPF del país importador tiene ~~el cometido~~ la responsabilidad de verificar si se ha cumplido el tratamiento requerido.	**Colombia** Traducción especifica del idioma ingles al español. *Category : TRANSLATION*
1379	225	La ONPF del país en el que se realiza o se inicia la fumigación tiene ~~el cometido~~ la responsabilidad de evaluar, aprobar y monitorear la aplicación de la fumigación como	**OIRSA** Uso correcto de términos. *Category : EDITORIAL*

#	Para	Text	Comment
		medida fitosanitaria, incluidas las fumigaciones realizadas por entidades fumigadoras autorizadas. Sin embargo, cuando los tratamientos se realicen o finalicen durante el transporte, la ONPF del país importador tiene ~~el cometido~~ la responsabilidad de verificar si se ha cumplido el tratamiento requerido.	
1380	226	This appendix is for reference purposes only and is not a prescriptive part of the standard. Appendices to the standard.document should be maintained in the substantive ISPM.	**Nigeria** *Category : SUBSTANTIVE*
1381	227	~~**APPENDIX 1: Guidance for fumigation efficacy studies**~~[1]	**Costa Rica** Accept from IPPC Regional Workshop Latin America *Category : SUBSTANTIVE*
1382	227	~~**APPENDIX 1: Guidance for fumigation efficacy studies**~~[1]	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1383	227	~~**APPENDIX 1: Guidance for fumigation efficacy studies**~~[1]	**COSAVE** See general comment (deletion of this paragraph apply for the complete Appendix 1) *Category : SUBSTANTIVE*
1384	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**Peru** See general comment (deletion of this paragraph apply for the complete Appendix 1) *Category : SUBSTANTIVE*
1385	227	~~**APPENDIX 1: Guidance for fumigation efficacy studies**~~[1]	**Brazil** See general comment *Category : SUBSTANTIVE*
1386	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**Ozone Secretariat** REMOVE. This is fully described in ISPM 28. *Category : SUBSTANTIVE*
1387	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**Argentina** See general comment (deletion of this paragraph apply for the complete Appendix 1) *Category : SUBSTANTIVE*
1388	227	~~**APPENDIX 1: Guidance for fumigation efficacy studies**~~[1]	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:18 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1389	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**Guyana** The appendices contain useful information and should be retained *Category : SUBSTANTIVE*
1390	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**Saint Vincent and The Grenadines** The appendices contain useful information and should be retained *Category : SUBSTANTIVE*
1391	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**Trinidad and Tobago** The appendices contain useful information and should be retained *Category : SUBSTANTIVE*

#	Para	Text	Comment
1392	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**United States of America** Suggest this be included in ISPM 28. You should not mix operational with research in the same document *Category : TECHNICAL*
1393	227	~~**APPENDIX 1: Guidance for fumigation efficacy studies**[1]~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1394	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**Australia** Remove appendix 1 - This information is included in ISPM 28. *Category : TECHNICAL*
1395	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**Jamaica** The appendices contain useful information and should be retained. *Category : SUBSTANTIVE*
1396	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**IPPC Regional Workshop Caribbean** The meeting determined that the appendices contain useful information and should be retained *Category : SUBSTANTIVE*
1397	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**Singapore** To retain Appendix 1 as these guidance information are practical and useful. *Category : SUBSTANTIVE*
1398	227	**APPENDIX 1: Guidance for fumigation efficacy studies**[1]	**Philippines** Is this an on-going research? would the result of this study be the basis for standard concentration reading? *Category : SUBSTANTIVE*
1399	227	~~**APÉNDICE 1: Orientación relativa a los estudios sobre la eficacia de la fumigación**[1]~~	**Colombia** El apéndice 1 sobre los estudios para la eficacia del tratamiento no es un requisito de esta norma y debe suprimirse. La norma proporciona directrices técnicas sobre la aplicación de tratamientos con una eficacia declarada. El apéndice 1 proporciona información útil a las partes contratantes, pero debe incluirse como apéndice de la NIMF 28. Teniendo en cuenta que la revisión de la NIMF 18 se encuentra en el LOT para las NIMF, también sugerimos incluir el apéndice 2 de la NIMF 18 como apéndice de la NIMF 28. *Category : SUBSTANTIVE*
1400	227	**APÉNDICE 1: Orientación relativa a los estudios sobre la eficacia de la fumigación**[1]	**Panama** Se solicita retirar el apéndice 1 y sea trasladado como un apéndice de la NIMF No. 28; ya que la presente norma habla del proceso de fumigación y no de desarrollo de estudios de eficacia de nuevos agentes químicos. *Category : SUBSTANTIVE*
1401	227	**APÉNDICE 1: Orientación relativa a los estudios sobre la eficacia de la fumigación**[1]	**OIRSA** Se solicita retirar por completo el apéndice 1 y sea trasladado como un apéndice de la NIMF No. 28; ya que la presente norma habla del proceso de fumigación y no de desarrollo de estudios de eficacia de nuevos agentes químicos. *Category : SUBSTANTIVE*
1402	229	~~**1. Research Materials**~~	**Costa Rica** See general comment *Category : SUBSTANTIVE*
1403	229	~~**1. Research Materials**~~	**IPPC Regional Workshop Latin America**

#	Para	Text	Comment
			See general comments *Category : SUBSTANTIVE*
1404	229	~~1. Research Materials~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1405	229	~~1. Research Materials~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:18 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1406	229	1. ~~Research Materials~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1407	229	~~1. Research Materials~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1408	230	~~It is recommended that samples of the different life stages of the pests studied are archived in order to, among other reasons, resolve possible future disputes on identification (voucher specimens). The commodity to be used for confirmation tests should be of normal commercial condition.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1409	230	~~It is recommended that samples of the different life stages of the pests studied are archived in order to, among other reasons, resolve possible future disputes on identification (voucher specimens). The commodity to be used for confirmation tests should be of normal commercial condition.~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1410	230	~~It is recommended that samples of the different life stages of the pests studied are archived in order to, among other reasons, resolve possible future disputes on identification (voucher specimens). The commodity to be used for confirmation tests should be of normal commercial condition.~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1411	230	~~It is recommended that samples of the different life stages of the pests studied are archived in order to, among other reasons, resolve possible future disputes on identification (voucher specimens). The commodity to be used for confirmation tests should be of normal commercial condition.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:19 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1412	230	~~It is recommended that samples of the different life stages~~	**Uruguay**

#	Para	Text	Comment
		~~of the pests studied are archived in order to, among other reasons, resolve possible future disputes on identification (voucher specimens). The commodity to be used for confirmation tests should be of normal commercial condition.~~	See general comment *Category : SUBSTANTIVE*
1413	230	It is recommended that samples of the different life stages of the pests studied are archived in order to, among other reasons, resolve possible future disputes on identification (voucher specimens). The commodity to be used for ~~confirmation~~ large-scale confirmatory tests should be of normal commercial condition.	**China** "large-scale confirmatory tests" have been used widely including ISPM No.18 and RSPM No.34. *Category : SUBSTANTIVE*
1414	230	~~It is recommended that samples of the different life stages of the pests studied are archived in order to, among other reasons, resolve possible future disputes on identification (voucher specimens). The commodity to be used for confirmation tests should be of normal commercial condition.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1415	231	~~To perform research into the control of regulated pests by fumigation, it is necessary to know the basic biology of the pests as well as to define how the pests used in the research will be obtained. Fumigation experiments should be carried out on the commodity infested naturally in the field or with laboratory-reared pests that are used to infest the commodity preferably in a natural manner. The method of rearing, feeding and refreshing of the pest colony should be carefully detailed.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1416	231	~~To perform research into the control of regulated pests by fumigation, it is necessary to know the basic biology of the pests as well as to define how the pests used in the research will be obtained. Fumigation experiments should be carried out on the commodity infested naturally in the field or with laboratory-reared pests that are used to infest the commodity preferably in a natural manner. The method of rearing, feeding and refreshing of the pest colony should be carefully detailed.~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1417	231	~~To perform research into the control of regulated pests by fumigation, it is necessary to know the basic biology of the~~	**Brazil** See general comment *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~pests as well as to define how the pests used in the research will be obtained. Fumigation experiments should be carried out on the commodity infested naturally in the field or with laboratory-reared pests that are used to infest the commodity preferably in a natural manner. The method of rearing, feeding and refreshing of the pest colony should be carefully detailed.~~	
1418	231	~~To perform research into the control of regulated pests by fumigation, it is necessary to know the basic biology of the pests as well as to define how the pests used in the research will be obtained. Fumigation experiments should be carried out on the commodity infested naturally in the field or with laboratory-reared pests that are used to infest the commodity preferably in a natural manner. The method of rearing, feeding and refreshing of the pest colony should be carefully detailed.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:19 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1419	231	~~To perform research into the control of regulated pests by fumigation, it is necessary to know the basic biology of the pests as well as to define how the pests used in the research will be obtained. Fumigation experiments should be carried out on the commodity infested naturally in the field or with laboratory-reared pests that are used to infest the commodity preferably in a natural manner. The method of rearing, feeding and refreshing of the pest colony should be carefully detailed.~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1420	231	~~To perform research into the control of regulated pests by fumigation, it is necessary to know the basic biology of the pests as well as to define how the pests used in the research will be obtained. Fumigation experiments should be carried out on the commodity infested naturally in the field or with laboratory-reared pests that are used to infest the commodity preferably in a natural manner. The method of rearing, feeding and refreshing of the pest colony should be carefully detailed.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1421	231	Para realizar investigaciones sobre el control de plagas reglamentadas mediante la fumigación es necesario conocer la biología básica de las plagas, además de definir cómo se obtendrán las plagas utilizadas en las investigaciones. Los	**Colombia** Con relación a el concepto "o con plagas criadas en laboratorio que se utilicen para infestar el producto, preferiblemente de forma natural", se considera que no es posible realizarlo de forma natural, teniendo en cuenta que el número de individuos del estado de la plaga que queremos investigar a pequeña y grande escala, no es manejable poder realizar la

#	Para	Text	Comment
		experimentos de fumigación deberían realizarse en el producto infestado naturalmente en el campo o con plagas criadas en laboratorio que se utilicen para infestar el producto, preferiblemente de forma natural. El método de cría, alimentación y renovación de la colonia de la plaga debería detallarse minuciosamente.	infestación de una manera natural. *Category : SUBSTANTIVE*
1422	232	~~Note: Studies carried out with pests *in vitro* are not recommended unless preliminary testing indicates that results from *in vitro* treatments are no different than *in situ*.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1423	232	~~Note: Studies carried out with pests *in vitro* are not recommended unless preliminary testing indicates that results from *in vitro* treatments are no different than *in situ*.~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1424	232	~~Note: Studies carried out with pests *in vitro* are not recommended unless preliminary testing indicates that results from *in vitro* treatments are no different than *in situ*.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:22 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1425	232	~~Note: Studies carried out with pests *in vitro* are not recommended unless preliminary testing indicates that results from *in vitro* treatments are no different than *in situ*.~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1426	232	~~Note: Studies carried out with pests *in vitro* are not recommended unless preliminary testing indicates that results from *in vitro* treatments are no different than *in situ*.~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1427	232	~~Note: Studies carried out with pests *in vitro* are not recommended unless preliminary testing indicates that results from *in vitro* treatments are no different than *in situ*.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1428	233	~~**2. Instrument Recording**~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1429	233	~~**2. Instrument Recording**~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1430	233	~~**2. Instrument Recording**~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1431	233	~~**2. Instrument Recording**~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:23 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1432	233	~~**2. Instrument Recording**~~	**Uruguay**

#	Para	Text	Comment
			See general comment *Category : SUBSTANTIVE*
1433	233	~~2. Instrument Recording~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1434	234	~~Instrument recording systems used to record fumigation parameters, such as gas concentration and enclosure and commodity temperature, should be calibrated, certified and used according to the manufacturer's instructions. Routine calibration of all measuring instruments should be conducted periodically.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1435	234	~~Instrument recording systems used to record fumigation parameters, such as gas concentration and enclosure and commodity temperature, should be calibrated, certified and used according to the manufacturer's instructions. Routine calibration of all measuring instruments should be conducted periodically.~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1436	234	~~Instrument recording systems used to record fumigation parameters, such as gas concentration and enclosure and commodity temperature, should be calibrated, certified and used according to the manufacturer's instructions. Routine calibration of all measuring instruments should be conducted periodically.~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1437	234	Instrument recording systems used to record fumigation parameters, such as gas concentration and enclosure and commodity temperature, should be calibrated, certified and used according to the manufacturer's instructions. Routine calibration of all measuring instruments should be conducted ~~periodically~~periodically and recorded.	**Ghana** *Category : SUBSTANTIVE*
1438	234	~~Instrument recording systems used to record fumigation parameters, such as gas concentration and enclosure and commodity temperature, should be calibrated, certified and used according to the manufacturer's instructions. Routine calibration of all measuring instruments should be conducted periodically.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:23 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1439	234	~~Instrument recording systems used to record fumigation parameters, such as gas concentration and enclosure and commodity temperature, should be calibrated, certified and~~	**Uruguay** See general comment *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~used according to the manufacturer's instructions. Routine calibration of all measuring instruments should be conducted periodically.~~	
1440	234	~~Instrument recording systems used to record fumigation parameters, such as gas concentration and enclosure and commodity temperature, should be calibrated, certified and used according to the manufacturer's instructions. Routine calibration of all measuring instruments should be conducted periodically.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1441	234	Los sistemas de registro de los instrumentos empleados para registrar los parámetros de la fumigación, como la concentración de gas y la temperatura del recinto y del producto, deberían estar calibrados y certificados ~~y utilizarse según las instrucciones del fabricante~~por el organismo de metrología correspondiente. Debería realizarse periódicamente una calibración sistemática de todos los instrumentos de medición.	**Colombia** Para garantizar la eficacia de las mediciones. *Category : SUBSTANTIVE*
1442	235	~~**3. Estimation and Confirmation of Optimal Gas Concentration and its Duration for Treatment**~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment> *Category : SUBSTANTIVE*
1443	235	~~**3. Estimation and Confirmation of Optimal Gas Concentration and its Duration for Treatment**~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1444	235	~~**3. Estimation and Confirmation of Optimal Gas Concentration and its Duration for Treatment**~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:23 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1445	235	~~**3. Estimation and Confirmation of Optimal Gas Concentration and its Duration for Treatment**~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1446	235	**3. Estimation and Confirmation of Optimal Gas Concentration and ~~its Duration for Treatment~~Treatment Duration**	**European Union** Clearer. *Category : EDITORIAL*
1447	235	**3~~.~~ Estimation and Confirmation of Optimal Gas Concentration and Treatment Duration~~Estimation and Confirmation of Optimal Gas Concentration and its Duration for Treatment~~**	**EPPO** Clearer *Category : EDITORIAL*

#	Para	Text	Comment
1448	235	~~3. Estimation and Confirmation of Optimal Gas Concentration and its Duration for Treatment~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1449	235	~~3. Estimation and Confirmation of Optimal Gas Concentration and its Duration for Treatment~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1450	236	~~3.1 Preliminary tests~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1451	236	~~3.1 Preliminary tests~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1452	236	~~3.1 Preliminary tests~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:23 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1453	236	~~3.1 Preliminary tests~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1454	236	~~3.1 Preliminary tests~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1455	236	~~3.1 Preliminary tests~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1456	237	~~The following steps should be carried out to estimate the dose required to achieve an adequate efficacy:~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1457	237	~~The following steps should be carried out to estimate the dose required to achieve an adequate efficacy:~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1458	237	~~The following steps should be carried out to estimate the dose required to achieve an adequate efficacy:~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:23 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1459	237	~~The following steps should be carried out to estimate the dose required to achieve an adequate efficacy:~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1460	237	~~The following steps should be carried out to estimate the dose required to achieve an adequate efficacy:~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1461	237	~~The following steps should be carried out to estimate the~~	**COSAVE**

#	Para	Text	Comment
		~~dose required to achieve an adequate efficacy:~~	See general comments *Category : SUBSTANTIVE*
1462	238	~~The treatment tolerance of the different life stages of the pest in question that may be present in the commodity should be established with the purpose of determining the most resistant stage. The most resistant stage, even if it is not the most common one occurring in the commodity, is the stage for which the treatment dose is established.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1463	238	~~The treatment tolerance of the different life stages of the pest in question that may be present in the commodity should be established with the purpose of determining the most resistant stage. The most resistant stage, even if it is not the most common one occurring in the commodity, is the stage for which the treatment dose is established.~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1464	238	~~The treatment tolerance of the different life stages of the pest in question that may be present in the commodity should be established with the purpose of determining the most resistant stage. The most resistant stage, even if it is not the most common one occurring in the commodity, is the stage for which the treatment dose is established.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:24 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1465	238	~~The treatment tolerance of the different life stages of the pest in question that may be present in the commodity should be established with the purpose of determining the most resistant stage. The most resistant stage, even if it is not the most common one occurring in the commodity, is the stage for which the treatment dose is established.~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1466	238	The treatment tolerance of the different life stages of the pest in question that may be present in the commodity should be established with the purpose of determining the most resistant stage. The most resistant stage, even if it is not the most common one occurring in the commodity, is the stage for which the treatment dose is established.	**European Union** Should consider to add material from paragraph 213 of the draft standard on temperature treatments on treatments developed for more than one commodity. *Category : SUBSTANTIVE*
1467	238	The treatment tolerance of the different life stages of the pest in question that may be present in the commodity should be ~~established~~ assessed with the purpose of determining the most resistant stage. The most resistant stage, even if it is not the most common one occurring in the commodity, is the stage for which the treatment dose is	**European Union** Improvement. *Category : EDITORIAL*

#	Para	Text	Comment
		established.	
1468	238	The treatment tolerance of the different life stages of the pest in question that may be present in the commodity should be established with the purpose of determining the most resistant stage. The most resistant stage, even if it is not the most common one occurring in the commodity, is the stage for which the treatment dose is established.	**EPPO** it should be considered to add material from paragraph 213 of the draft standard on temperature treatments on treatments developed for more than one commodity. *Category : SUBSTANTIVE*
1469	238	The treatment tolerance of the different life stages of the pest in question that may be present in the commodity should be ~~established~~ assessed with the purpose of determining the most resistant stage. The most resistant stage, even if it is not the most common one occurring in the commodity, is the stage for which the treatment dose is established.	**EPPO** Improvent *Category : EDITORIAL*
1470	238	~~The treatment tolerance of the different life stages of the pest in question that may be present in the commodity should be established with the purpose of determining the most resistant stage. The most resistant stage, even if it is not the most common one occurring in the commodity, is the stage for which the treatment dose is established.~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1471	238	~~The treatment tolerance of the different life stages of the pest in question that may be present in the commodity should be established with the purpose of determining the most resistant stage. The most resistant stage, even if it is not the most common one occurring in the commodity, is the stage for which the treatment dose is established.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1472	239	~~The treatment tolerance of different shapes, size and varieties of the commodities should be addressed to determine if they may influence the treatment outcome.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1473	239	~~The treatment tolerance of different shapes, size and varieties of the commodities should be addressed to determine if they may influence the treatment outcome.~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1474	239	~~The treatment tolerance of different shapes, size and varieties of the commodities should be addressed to determine if they may influence the treatment outcome.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:24 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1475	239	~~The treatment tolerance of different shapes, size and~~	**IPPC Regional Workshop Latin America** See general comments

#	Para	Text	Comment
		~~varieties of the commodities should be addressed to determine if they may influence the treatment outcome.~~	*Category : SUBSTANTIVE*
1476	239	The treatment tolerance of different shapes, size and varieties of the ~~commodities~~ commodity should be addressed to determine if they may influence the treatment outcome.	**European Union** For consistency. *Category : EDITORIAL*
1477	239	The treatment tolerance of different shapes, size and varieties of the ~~commodities~~ commodity should be addressed to determine if they may influence the treatment outcome.	**EPPO** For consistency *Category : EDITORIAL*
1478	239	~~The treatment tolerance of different shapes, size and varieties of the commodities should be addressed to determine if they may influence the treatment outcome.~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1479	239	~~The treatment tolerance of different shapes, size and varieties of the commodities should be addressed to determine if they may influence the treatment outcome.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1480	240	~~The optimal fumigant concentration and treatment duration at each temperature should be determined experimentally. If pertinent data do not already exist, it is recommended that at least five dose levels and a control are used for each pest life stage, temperature, and shape or size of commodity, with a minimum of 120 individuals where possible for each of the doses and a minimum of three replicates. The relationship between optimal fumigant concentration and its duration and response for each life stage and temperature should be determined to identify the most resistant stage. The optimum dose to kill the pest at the most resistant stage in the variety or commodity type where the target pest shows the highest resistance needs to be determined. The remainder of the research should be conducted on the most fumigant-resistant life stage in the variety or commodity type where the target pest shows the highest resistance at each temperature.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1481	240	~~The optimal fumigant concentration and treatment duration at each temperature should be determined experimentally. If pertinent data do not already exist, it is recommended that at least five dose levels and a control are used for each pest~~	**Brazil** See general comment *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~life stage, temperature, and shape or size of commodity, with a minimum of 120 individuals where possible for each of the doses and a minimum of three replicates. The relationship between optimal fumigant concentration and its duration and response for each life stage and temperature should be determined to identify the most resistant stage. The optimum dose to kill the pest at the most resistant stage in the variety or commodity type where the target pest shows the highest resistance needs to be determined. The remainder of the research should be conducted on the most fumigant-resistant life stage in the variety or commodity type where the target pest shows the highest resistance at each temperature.~~	
1482	240	The optimal fumigant concentration and treatment duration at each temperature should be determined experimentally. ~~If~~ For example, if pertinent data do not already exist, it is recommended that at least five dose levels and a control are used for each pest life stage, temperature, and shape or size of commodity, with a minimum of 120 individuals where possible for each of the doses and a minimum of three replicates. The relationship between optimal fumigant concentration and its duration and response for each life stage and temperature should be determined to identify the most resistant stage. The optimum dose to kill the pest at the most resistant stage in the variety or commodity type where the target pest shows the highest resistance needs to be determined. The remainder of the research should be conducted on the most fumigant-resistant life stage in the variety or commodity type where the target pest shows the highest resistance at each temperature.	**Ozone Secretariat** Figures should be examples because an appropriate test plan is not only one method. Deciding dose levels or minimum numbers of individual in advance is difficult. A test plan should be decided depending on insect species or target commodities for the test or other factors. *Category : TECHNICAL*
1483	240	The optimal fumigant concentration and treatment duration at each temperature should be determined experimentally. If pertinent data do not already exist, it is recommended that at least five dose levels and a control are used for each pest life stage, temperature, and shape or size of commodity, with a minimum of 120 individuals where possible for each of the doses and a minimum of three replicates. The relationship between optimal fumigant concentration and its	**EPPO** From our reading of this draft paragraph 1800 individuals might be required for one experiment (5 dose levels * 3 replicates * 120 individuals pre replicate). This is too high. For some organisms (e.g. Anoplophora species) only small numbers may be available. **Russian Federation** I agree *Category : SUBSTANTIVE*

#	Para	Text	Comment
		duration and response for each life stage and temperature should be determined to identify the most resistant stage. The optimum dose to kill the pest at the most resistant stage in the variety or commodity type where the target pest shows the highest resistance needs to be determined. The remainder of the research should be conducted on the most fumigant-resistant life stage in the variety or commodity type where the target pest shows the highest resistance at each temperature.	
1484	240	~~The optimal fumigant concentration and treatment duration at each temperature should be determined experimentally. If pertinent data do not already exist, it is recommended that at least five dose levels and a control are used for each pest life stage, temperature, and shape or size of commodity, with a minimum of 120 individuals where possible for each of the doses and a minimum of three replicates. The relationship between optimal fumigant concentration and its duration and response for each life stage and temperature should be determined to identify the most resistant stage. The optimum dose to kill the pest at the most resistant stage in the variety or commodity type where the target pest shows the highest resistance needs to be determined. The remainder of the research should be conducted on the most fumigant-resistant life stage in the variety or commodity type where the target pest shows the highest resistance at each temperature.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:24 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1485	240	~~The optimal fumigant concentration and treatment duration at each temperature should be determined experimentally. If pertinent data do not already exist, it is recommended that at least five dose levels and a control are used for each pest life stage, temperature, and shape or size of commodity, with a minimum of 120 individuals where possible for each of the doses and a minimum of three replicates. The relationship between optimal fumigant concentration and its duration and response for each life stage and temperature should be determined to identify the most resistant stage. The optimum dose to kill the pest at the most resistant stage in the variety or commodity type where the target pest~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~shows the highest resistance needs to be determined. The remainder of the research should be conducted on the most fumigant-resistant life stage in the variety or commodity type where the target pest shows the highest resistance at each temperature.~~	
1486	240	The optimal fumigant concentration and treatment duration at each temperature should be determined experimentally. If pertinent data do not already exist, it is recommended that at least five dose levels and a control are used for each pest life stage, temperature, and shape or size of commodity, with a minimum of 120 individuals where possible for each of the doses and a minimum of three replicates. The relationship between optimal fumigant concentration and its duration and response for each life stage and temperature should be determined to identify the most resistant stage. The optimum dose to kill the pest at the most resistant stage in the variety or commodity type where the target pest shows the highest resistance needs to be determined. The remainder of the research should be conducted on the most fumigant-resistant life stage in the variety or commodity type where the target pest shows the highest resistance at each temperature.	**European Union** From our reading of this draft paragraph 1800 individuals might be required for one experiment (5 dose levels * 3 replicates * 120 individuals pre replicate). This is too high. For some organisms (e.g. Anoplophora species) only small numbers may be available. *Category : SUBSTANTIVE*
1487	240	~~The optimal fumigant concentration and treatment duration at each temperature should be determined experimentally. If pertinent data do not already exist, it is recommended that at least five dose levels and a control are used for each pest life stage, temperature, and shape or size of commodity, with a minimum of 120 individuals where possible for each of the doses and a minimum of three replicates. The relationship between optimal fumigant concentration and its duration and response for each life stage and temperature should be determined to identify the most resistant stage. The optimum dose to kill the pest at the most resistant stage in the variety or commodity type where the target pest shows the highest resistance needs to be determined. The remainder of the research should be conducted on the most fumigant-resistant life stage in the variety or commodity type where the target pest shows the highest resistance at~~	**Uruguay** See general comment *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~each temperature.~~	
1488	240	~~The optimal fumigant concentration and treatment duration at each temperature should be determined experimentally. If pertinent data do not already exist, it is recommended that at least five dose levels and a control are used for each pest life stage, temperature, and shape or size of commodity, with a minimum of 120 individuals where possible for each of the doses and a minimum of three replicates. The relationship between optimal fumigant concentration and its duration and response for each life stage and temperature should be determined to identify the most resistant stage. The optimum dose to kill the pest at the most resistant stage in the variety or commodity type where the target pest shows the highest resistance needs to be determined. The remainder of the research should be conducted on the most fumigant-resistant life stage in the variety or commodity type where the target pest shows the highest resistance at each temperature.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1489	240	Deberían determinarse experimentalmente la concentración de fumigante y duración del tratamiento óptimos para cada temperatura. Si no existen datos ~~pertinentes~~ previos, se recomienda utilizar al menos cinco niveles de dosis y un control para cada etapa de desarrollo de la plaga, temperatura y forma o tamaño del producto, con un mínimo de 120 especímenes, cuando sea posible, para cada una de las dosis y un mínimo de tres réplicas. Se debería estudiar la relación entre la concentración de fumigante y duración óptimos y la respuesta para cada etapa de desarrollo y temperatura, con objeto de determinar qué etapa es la más resistente. Debe determinarse la dosis óptima para matar la plaga en su etapa de desarrollo más resistente en la variedad o tipo de producto donde la plaga objetivo muestre la mayor resistencia. El resto de la investigación debería realizarse sobre la etapa de desarrollo más resistente al fumigante en la variedad o tipo de producto en el que la plaga objetivo muestre la mayor resistencia a cada temperatura.	**Cuba** *Category : EDITORIAL*
1490	241	~~During the period of post-treatment observation of the commodities and associated pests, both treated and control~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America

#	Para	Text	Comment
		~~commodities must remain under favourable conditions for survival of the pests. The untreated controls must respond normally for the experiment to be valid. Any study where the control or check mortalities are high indicates that the organisms were held and handled under suboptimal conditions. These organisms may give misleading results if their treatment mortality is used to predict an optimum treatment dose. In general, mortality in the control or check should not exceed 10%.~~	See general comment *Category : SUBSTANTIVE*
1491	241	~~During the period of post-treatment observation of the commodities and associated pests, both treated and control commodities must remain under favourable conditions for survival of the pests. The untreated controls must respond normally for the experiment to be valid. Any study where the control or check mortalities are high indicates that the organisms were held and handled under suboptimal conditions. These organisms may give misleading results if their treatment mortality is used to predict an optimum treatment dose. In general, mortality in the control or check should not exceed 10%.~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1492	241	During the period of post-treatment observation of the commodities and associated pests, both treated and control commodities must remain under favourable conditions for survival of the pests. The untreated controls must respond normally for the experiment to be valid. Any study where the control or check mortalities are high indicates that the organisms were held and handled under suboptimal conditions. These organisms may give misleading results if their treatment mortality is used to predict an optimum treatment dose. In general, mortality in the control or check should not exceed 10%.	**Ozone Secretariat** Remove "10%". Figures of 10% should be examples because natural mortality is depended on insect species, test temperature or host plant (plant product) used for the test. *Category : TECHNICAL*
1493	241	~~During the period of post-treatment observation of the commodities and associated pests, both treated and control commodities must remain under favourable conditions for survival of the pests. The untreated controls must respond normally for the experiment to be valid. Any study where the control or check mortalities are high indicates that the organisms were held and handled under suboptimal~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:24 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~conditions. These organisms may give misleading results if their treatment mortality is used to predict an optimum treatment dose. In general, mortality in the control or check should not exceed 10%.~~	
1494	241	~~During the period of post-treatment observation of the commodities and associated pests, both treated and control commodities must remain under favourable conditions for survival of the pests. The untreated controls must respond normally for the experiment to be valid. Any study where the control or check mortalities are high indicates that the organisms were held and handled under suboptimal conditions. These organisms may give misleading results if their treatment mortality is used to predict an optimum treatment dose. In general, mortality in the control or check should not exceed 10%.~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1495	241	During the period of post-treatment observation of the commodities and associated pests, both treated and control commodities must remain under favourable conditions for survival of the pests. The untreated controls must respond normally for the experiment to be valid. Any study where the control or check mortalities are high indicates that the organisms were held and handled under suboptimal conditions. These organisms may give misleading results if their treatment mortality is used to predict an optimum treatment dose. ~~In general, mortality in the control or check should not exceed 10%.~~	**Japan** See Japan's general comment. *Category : TECHNICAL*
1496	241	During the period of post-treatment observation of the commodities and associated pests, both treated and control commodities must remain under favourable conditions for survival of the pests. The untreated controls must respond normally for the experiment to be valid. Any study where the control or check mortalities are high indicates that the organisms were held and handled under suboptimal conditions. These organisms may give misleading results if their treatment mortality is used to predict an optimum treatment dose. In general, mortality in the control or check should not exceed 10%.	**European Union** Delete "or check" (in the last sentence) or explain . *Category : EDITORIAL*

#	Para	Text	Comment
1497	241	During the period of post-treatment observation of the commodities and associated pests, both treated and control commodities must remain under favourable conditions for survival of the pests. The untreated controls must respond normally for the experiment to be valid. Any study where the control or check mortalities are high indicates that the organisms were held and handled under suboptimal conditions. These organisms may give misleading results if their treatment mortality is used to predict an optimum treatment dose. In general, mortality in the control or check should not exceed 10%.	**EPPO** Delete "or check" (in the last sentence) or explain *Category : EDITORIAL*
1498	241	~~During the period of post-treatment observation of the commodities and associated pests, both treated and control commodities must remain under favourable conditions for survival of the pests. The untreated controls must respond normally for the experiment to be valid. Any study where the control or check mortalities are high indicates that the organisms were held and handled under suboptimal conditions. These organisms may give misleading results if their treatment mortality is used to predict an optimum treatment dose. In general, mortality in the control or check should not exceed 10%.~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1499	241	~~During the period of post-treatment observation of the commodities and associated pests, both treated and control commodities must remain under favourable conditions for survival of the pests. The untreated controls must respond normally for the experiment to be valid. Any study where the control or check mortalities are high indicates that the organisms were held and handled under suboptimal conditions. These organisms may give misleading results if their treatment mortality is used to predict an optimum treatment dose. In general, mortality in the control or check should not exceed 10%.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1500	242	~~**3.2 Large-scale or extrapolation (confirmatory) tests**~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1501	242	~~**3.2 Large-scale or extrapolation (confirmatory) tests**~~	**Brazil** See general comment

#	Para	Text	Comment
			Category : SUBSTANTIVE
1502	242	~~3.2 Large-scale or extrapolation (confirmatory) tests~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:25 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1503	242	~~3.2 Large-scale or extrapolation (confirmatory) tests~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1504	242	~~3.2 Large-scale or extrapolation (confirmatory) tests~~	**Uruguay** See general comments *Category : SUBSTANTIVE*
1505	242	~~3.2 Large-scale or extrapolation (confirmatory) tests~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1506	243	~~To confirm whether the estimated optimal fumigant concentration and its duration at each temperature provides the adequate efficacy, two methods are recommended: (1) treat a large number of individuals of the most resistant life stage of the pest while achieving complete mortality; or (2) treat the most resistant stage over a range of levels of efficacy that may be less than adequate and estimate the adequate efficacy using a regression analysis. The number treated will depend on the required level of confidence.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1507	243	~~To confirm whether the estimated optimal fumigant concentration and its duration at each temperature provides the adequate efficacy, two methods are recommended: (1) treat a large number of individuals of the most resistant life stage of the pest while achieving complete mortality; or (2) treat the most resistant stage over a range of levels of efficacy that may be less than adequate and estimate the adequate efficacy using a regression analysis. The number treated will depend on the required level of confidence.~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1508	243	~~To confirm whether the estimated optimal fumigant concentration and its duration at each temperature provides the adequate efficacy, two methods are recommended: (1) treat a large number of individuals of the most resistant life stage of the pest while achieving complete mortality; or (2) treat the most resistant stage over a range of levels of efficacy that may be less than adequate and estimate the adequate efficacy using a regression analysis. The number~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:25 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~treated will depend on the required level of confidence.~~	
1509	243	~~To confirm whether the estimated optimal fumigant concentration and its duration at each temperature provides the adequate efficacy, two methods are recommended: (1) treat a large number of individuals of the most resistant life stage of the pest while achieving complete mortality; or (2) treat the most resistant stage over a range of levels of efficacy that may be less than adequate and estimate the adequate efficacy using a regression analysis. The number treated will depend on the required level of confidence.~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1510	243	To confirm whether the estimated optimal fumigant concentration and its duration at each temperature provides the adequate efficacy, two methods are recommended: (1) treat a large number of individuals of the most resistant life stage of the pest while achieving complete mortality; or (2) treat the most resistant stage over a range of levels of efficacy that may be less than adequate and estimate the adequate efficacy using a regression analysis. The number treated will depend on the required level of confidence.	**European Union** "over a range of levels of efficacy that may be less than adequate" is not clear. *Category : EDITORIAL*
1511	243	To confirm whether the estimated optimal fumigant concentration and its duration at each temperature provides the adequate efficacy, two methods are recommended: (1) treat a large number of individuals of the most resistant life stage of the pest while achieving complete mortality; or (2) treat the most resistant stage over a range of levels of efficacy that may be less than adequate and estimate the adequate efficacy using a regression analysis. The number treated will depend on the required level of confidence.	**EPPO** "over a range of levels of efficacy that may be less than adequate" is not clear *Category : EDITORIAL*
1512	243	~~To confirm whether the estimated optimal fumigant concentration and its duration at each temperature provides the adequate efficacy, two methods are recommended: (1) treat a large number of individuals of the most resistant life stage of the pest while achieving complete mortality; or (2) treat the most resistant stage over a range of levels of efficacy that may be less than adequate and estimate the adequate efficacy using a regression analysis. The number treated will depend on the required level of confidence.~~	**Uruguay** See general comment *Category : SUBSTANTIVE*

#	Para	Text	Comment
1513	243	~~To confirm whether the estimated optimal fumigant concentration and its duration at each temperature provides the adequate efficacy, two methods are recommended: (1) treat a large number of individuals of the most resistant life stage of the pest while achieving complete mortality; or (2) treat the most resistant stage over a range of levels of efficacy that may be less than adequate and estimate the adequate efficacy using a regression analysis. The number treated will depend on the required level of confidence.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1514	244	~~Treating a large number of individuals (usually many thousands or tens of thousands), using one set of treatment parameters (commodity, concentration, duration, temperature) and with no (or nearly no) survivors is a direct method of severely testing the efficacy of the treatment, and calculations of efficacy are straightforward.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1515	244	~~Treating a large number of individuals (usually many thousands or tens of thousands), using one set of treatment parameters (commodity, concentration, duration, temperature) and with no (or nearly no) survivors is a direct method of severely testing the efficacy of the treatment, and calculations of efficacy are straightforward.~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1516	244	~~Treating a large number of individuals (usually many thousands or tens of thousands), using one set of treatment parameters (commodity, concentration, duration, temperature) and with no (or nearly no) survivors is a direct method of severely testing the efficacy of the treatment, and calculations of efficacy are straightforward.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:25 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1517	244	~~Treating a large number of individuals (usually many thousands or tens of thousands), using one set of treatment parameters (commodity, concentration, duration, temperature) and with no (or nearly no) survivors is a direct method of severely testing the efficacy of the treatment, and calculations of efficacy are straightforward.~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1518	244	~~Treating a large number of individuals (usually many thousands or tens of thousands), using one set of treatment parameters (commodity, concentration, duration, temperature) and with no (or nearly no) survivors is a direct~~	**Uruguay** See general comment *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~method of severely testing the efficacy of the treatment, and calculations of efficacy are straightforward.~~	
1519	244	~~Treating a large number of individuals (usually many thousands or tens of thousands), using one set of treatment parameters (commodity, concentration, duration, temperature) and with no (or nearly no) survivors is a direct method of severely testing the efficacy of the treatment, and calculations of efficacy are straightforward.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1520	245	~~Establishing a treatment schedule via estimation using regression analysis should be accepted only if the data closely fit the model and the upper 95% confidence interval is used to establish the treatment parameters. This method is especially useful when it is too difficult or costly to test very large numbers of individuals and the treatment for achieving the required efficacy can be more severe than may be absolutely necessary.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1521	245	~~Establishing a treatment schedule via estimation using regression analysis should be accepted only if the data closely fit the model and the upper 95% confidence interval is used to establish the treatment parameters. This method is especially useful when it is too difficult or costly to test very large numbers of individuals and the treatment for achieving the required efficacy can be more severe than may be absolutely necessary.~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1522	245	~~Establishing a treatment schedule via estimation using regression analysis should be accepted only if the data closely fit the model and the upper 95% confidence interval is used to establish the treatment parameters. This method is especially useful when it is too difficult or costly to test very large numbers of individuals and the treatment for achieving the required efficacy can be more severe than may be absolutely necessary.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:25 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1523	245	~~Establishing a treatment schedule via estimation using regression analysis should be accepted only if the data closely fit the model and the upper 95% confidence interval is used to establish the treatment parameters. This method is especially useful when it is too difficult or costly to test~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~very large numbers of individuals and the treatment for achieving the required efficacy can be more severe than may be absolutely necessary.~~	
1524	245	Establishing a treatment schedule via estimation using regression analysis should be accepted only if the data closely fit the model and the upper 95% confidence interval is used to establish the treatment parameters. This method is especially useful when it is too difficult or costly to test very large numbers of ~~individuals and~~ individuals, however the ~~treatment~~ resulting schedule for achieving the required efficacy ~~can~~ may be more severe than ~~may be absolutely~~ necessary.	**European Union** Text modified to improve clarity. *Category : TECHNICAL*
1525	245	Establishing a treatment schedule via estimation using regression analysis should be accepted only if the data closely fit the model and the upper 95% confidence interval is used to establish the treatment parameters. This method is especially useful when it is too difficult or costly to test very large numbers of individuals ~~and~~ however the ~~treatment~~ resulting schedule for achieving the required efficacy ~~can~~ may be more severe than ~~may be absolutely~~ necessary.	**EPPO** Text modified to improve clarity *Category : TECHNICAL*
1526	245	~~Establishing a treatment schedule via estimation using regression analysis should be accepted only if the data closely fit the model and the upper 95% confidence interval is used to establish the treatment parameters. This method is especially useful when it is too difficult or costly to test very large numbers of individuals and the treatment for achieving the required efficacy can be more severe than may be absolutely necessary.~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1527	245	~~Establishing a treatment schedule via estimation using regression analysis should be accepted only if the data closely fit the model and the upper 95% confidence interval is used to establish the treatment parameters. This method is especially useful when it is too difficult or costly to test very large numbers of individuals and the treatment for achieving the required efficacy can be more severe than may be absolutely necessary.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*

#	Para	Text	Comment
1528	246	~~Because the most severe fumigant concentration and duration at each temperature measured during the confirmatory part of the research will be the fumigant concentration, temperature and duration required for the approved treatment, it is recommended that fluctuations in fumigant concentration and temperature during the large scale or extrapolation tests are kept as low as possible.~~	**Costa Rica** Accepted from IPPC regional workshop IPPC Regional Workshop Latin America See general comment *Category : SUBSTANTIVE*
1529	246	~~Because the most severe fumigant concentration and duration at each temperature measured during the confirmatory part of the research will be the fumigant concentration, temperature and duration required for the approved treatment, it is recommended that fluctuations in fumigant concentration and temperature during the large scale or extrapolation tests are kept as low as possible.~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1530	246	~~Because the most severe fumigant concentration and duration at each temperature measured during the confirmatory part of the research will be the fumigant concentration, temperature and duration required for the approved treatment, it is recommended that fluctuations in fumigant concentration and temperature during the large scale or extrapolation tests are kept as low as possible.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:25 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1531	246	~~Because the most severe fumigant concentration and duration at each temperature measured during the confirmatory part of the research will be the fumigant concentration, temperature and duration required for the approved treatment, it is recommended that fluctuations in fumigant concentration and temperature during the large scale or extrapolation tests are kept as low as possible.~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1532	246	~~Because~~ Often, the most severe fumigant concentration and duration at each temperature measured during the confirmatory part of the research will be assigned as the ~~fumigant~~ required concentration, temperature and duration ~~required for the approved treatment~~. Therefore, it is recommended that fluctuations in fumigant concentration and temperature during the large scale or extrapolation tests are kept as low as possible.	**European Union** For clarification. *Category : EDITORIAL*
1533	246	~~Because~~ Often, the most severe fumigant concentration and	**EPPO** clarification

#	Para	Text	Comment
		duration at each temperature measured during the confirmatory part of the research will be assigned as the ~~fumigant~~ required concentration, temperature and ~~duration required for the approved treatment~~duration. Therefore, it is recommended that fluctuations in fumigant concentration and temperature during the large scale or extrapolation tests are kept as low as possible.	*Category : EDITORIAL*
1534	246	~~Because the most severe fumigant concentration and duration at each temperature measured during the confirmatory part of the research will be the fumigant concentration, temperature and duration required for the approved treatment, it is recommended that fluctuations in fumigant concentration and temperature during the large scale or extrapolation tests are kept as low as possible.~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1535	246	~~Because the most severe fumigant concentration and duration at each temperature measured during the confirmatory part of the research will be the fumigant concentration, temperature and duration required for the approved treatment, it is recommended that fluctuations in fumigant concentration and temperature during the large scale or extrapolation tests are kept as low as possible.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1536	247	~~4. Record Keeping~~	**Brazil** See general comment *Category : SUBSTANTIVE*
1537	247	~~4. Record Keeping~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:26 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1538	247	~~4. Record Keeping~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1539	247	~~4. Record Keeping~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1540	247	~~4. Record Keeping~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1541	248	~~Test records and data need to be kept to validate the data requirements and should upon request be presented to interested parties, for example the NPPO of the importing~~	**Brazil** See general comment *Category : SUBSTANTIVE*

#	Para	Text	Comment
		~~country, for consideration in establishing an agreed commodity treatment.~~	
1542	248	~~Test records and data need to be kept to validate the data requirements and should upon request be presented to interested parties, for example the NPPO of the importing country, for consideration in establishing an agreed commodity treatment.~~	**CA** Cambio revisado por IPPC Regional Workshop Latin America el 7 sep. 2017 1:26 Accepted from Latin American IPPC regional workshop *Category : SUBSTANTIVE*
1543	248	~~Test records and data need to be kept to validate the data requirements and should upon request be presented to interested parties, for example the NPPO of the importing country, for consideration in establishing an agreed commodity treatment.~~	**IPPC Regional Workshop Latin America** See general comments *Category : SUBSTANTIVE*
1544	248	Test records and data need to be kept to validate the data requirements and should upon request be presented to interested parties~~, for example the NPPO of the importing country, for consideration in establishing an agreed commodity treatment~~.	**European Union** Agreeing treatments (intended meaning: between NPPOs ?) is not a necessity or even commonplace. Thus, the text is controversial and in any case superfluous. *Category : SUBSTANTIVE*
1545	248	Test records and data need to be kept to validate the data requirements and should upon request be presented to interested parties~~, for example the NPPO of the importing country, for consideration in establishing an agreed commodity treatment~~.	**EPPO** Agreeing treatments (intended meaning: between NPPOs ?) is not a necessity or even commonplace. Thus, the text is controversial and in any case superfluous. *Category : SUBSTANTIVE*
1546	248	~~Test records and data need to be kept to validate the data requirements and should upon request be presented to interested parties, for example the NPPO of the importing country, for consideration in establishing an agreed commodity treatment.~~	**Uruguay** See general comment *Category : SUBSTANTIVE*
1547	248	~~Test records and data need to be kept to validate the data requirements and should upon request be presented to interested parties, for example the NPPO of the importing country, for consideration in establishing an agreed commodity treatment.~~	**COSAVE** See general comments *Category : SUBSTANTIVE*
1548	250	**APPENDIX 2: Chemical properties of some common fumigants**	**IPPC Regional Workshop Asia** The conversion factors provided in this table are for under 25 deg C and a temperature change will change the conversion factors. Best to qualify the stated conversion factors as for under 25 deg C - provide technical justification. **APPPC** agreed by APPPC **China**

#	Para	Text	Comment
			China agreed to this regional comments. **Thailand** Thailand agree with APPPC comment. **Nepal** Support and agree with Regional Comment **Viet Nam** Vietnam agreed with this APPPC comment. *Category : EDITORIAL*
1549	250	**APPENDIX ~~2~~1: Chemical properties of some common fumigants**	**Peru** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*
1550	250	**APPENDIX ~~2~~1: Chemical properties of some common fumigants**	**Brazil** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*
1551	250	**APPENDIX 2: Chemical properties of some common fumigants**	**Ozone Secretariat** Needs to be expanded to cover some of the unique characteristics/differences of each gas. Needs to cover major differences between the gases e.g. adverse reactions like phosphine and copper, sulfuryl fluoride has low efficacy on eggs. *Category : SUBSTANTIVE*
1552	250	**APPENDIX ~~2~~1: Chemical properties of some common fumigants**	**Argentina** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*
1553	250	**APPENDIX 2: Chemical properties of some common fumigants**	**Saint Vincent and The Grenadines** Very useful information provided *Category : SUBSTANTIVE*
1554	250	**APPENDIX 2: Chemical properties of some common fumigants**	**Ghana** "Appendix 2" is relevant and must remain in the document *Category : TECHNICAL*
1555	250	**APPENDIX ~~2~~1: Chemical properties of some common fumigants**	**Uruguay** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*
1556	250	**APPENDIX 2: Chemical properties of some common fumigants**	**Trinidad and Tobago** Very useful information provided *Category : SUBSTANTIVE*
1557	250	**APPENDIX 2: Chemical properties of some common fumigants**	**United States of America** Suggest this appendix be deleted. It is not appropriate for this standard and the information can be found elsewhere. *Category : TECHNICAL*
1558	250	**APPENDIX 2: Chemical properties of some common fumigants**	**New Zealand** Needs to expanded to cover some of the unique characteristics/differences of each gas. Needs to cover major differecnes between the gases e.g. adverse reactions like phosphine and copper, SF has low efficacy on eggs. *Category : TECHNICAL*
1559	250	**APPENDIX 2: Chemical properties of some common fumigants**	**IPPC Regional Workshop Caribbean** Very useful information provided *Category : SUBSTANTIVE*

#	Para	Text	Comment
1560	250	**APPENDIX 2: Chemical properties of some common fumigants (the conversion factor in this table is under 25°C)**	**China** Temperature changes will cause conversion factors to change *Category : SUBSTANTIVE*
1561	250	**APPENDIX 2: Chemical properties of some common fumigants**	**Singapore** To retain Appendix 2 as these are practical and useful information at a glance. *Category : SUBSTANTIVE*
1562	250	**APPENDIX ~~2~~1: Chemical properties of some common fumigants**	**COSAVE** Consequencial change according the proposal to delete Appendix 1 *Category : EDITORIAL*
1563	251	**Fumigant ~~name~~active substance**	**European Union** This should be 'active substance' as this can mean 'Commercial name'. *Category : TECHNICAL*
1564	251	**Fumigant ~~name~~active substance**	**EPPO** This should be 'active substance' as this can mean 'Commercial name'. *Category : TECHNICAL*
1565	269	~~247~~408	**China** The conversion factor at 25 °C is calculated according to the molecular weight. *Category : SUBSTANTIVE*
1566	270	Ethane dinitrile ~~(EDN)~~	**European Union** For consistency with the other fumigants. *Category : EDITORIAL*
1567	270	Ethane ~~dinitrile (EDN)~~dinitrile	**EPPO** For consistency with the other fumigants. *Category : EDITORIAL*
1568	277	~~480~~470	**China** The conversion factor at 25 °C is calculated according to the molecular weight. *Category : SUBSTANTIVE*
1569	293	~~659~~906	**China** The conversion factor at 25 °C is calculated according to the molecular weight. *Category : SUBSTANTIVE*
1570	294	Methyl ~~bromide~~bromide Nigeria is in support of the use of methyl bromide for phytosanitary treatment pending when an alternative is readily available.	**Nigeria** *Category : TECHNICAL*
1571	302	~~260~~257	**China** The conversion factor at 25 °C is calculated according to the molecular weight. *Category : SUBSTANTIVE*
1572	310	~~580~~172	**China** The conversion factor at 25 °C is calculated according to the molecular weight. *Category : SUBSTANTIVE*
1573	318	~~300~~334	**China** The conversion factor at 25 °C is calculated according to the molecular weight. *Category : SUBSTANTIVE*
1574	327	~~730~~719	**China** The conversion factor at 25 °C is calculated according to the molecular weight. *Category : SUBSTANTIVE*

#	Para	Text	Comment
1575	335	~~266~~382	**China** The conversion factor at 25 °C is calculated according to the molecular weight. *Category : SUBSTANTIVE*
1576	343	~~245~~240	**China** The conversion factor at 25 °C is calculated according to the molecular weight. *Category : SUBSTANTIVE*
1577	345	**APPENDIX ~~3~~2: Formulae for calculating volume of geometrical shapes**	**Peru** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*
1578	345	**APPENDIX ~~3~~2: Formulae for calculating volume of geometrical shapes**	**Brazil** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*
1579	345	**APPENDIX ~~3~~2: Formulae for calculating volume of geometrical shapes**	**Argentina** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*
1580	345	**APPENDIX 3: Formulae for calculating volume of geometrical shapes**	**European Union** In relation to the EU, Appendix 3 is considered unnecessary. The information in it is available from basic geometry textbook. *Category : EDITORIAL*
1581	345	**APPENDIX 3: Formulae for calculating volume of geometrical shapes**	**EPPO** In relation to the EPPO region Appendix 3 is considered unnecessary. The information in it is available from basic geometry textbook. *Category : EDITORIAL*
1582	345	**APPENDIX 3: Formulae for calculating volume of geometrical shapes**	**Ghana** "Appendix 3" is relevant and must remain in the document *Category : TECHNICAL*
1583	345	**APPENDIX ~~3~~2: Formulae for calculating volume of geometrical shapes**	**Uruguay** Consequential change according the proposal to delete Appendix 1 *Category : EDITORIAL*
1584	345	**APPENDIX 3: Formulae for calculating volume of geometrical shapes**	**Australia** Remove appendix 3 - This does not add any value because these are not common fumigation structures. This knowledge should be known by a fumigator prior to beginning a fumigation. *Category : SUBSTANTIVE*
1585	345	**APPENDIX 3: Formulae for calculating volume of geometrical shapes**	**Singapore** To retain Appendix 3 as the formulae are practical and useful for application. *Category : SUBSTANTIVE*
1586	345	**APPENDIX ~~3~~2: Formulae for calculating volume of geometrical shapes**	**COSAVE** Consequencial change according the proposal to delete Appendix 1 *Category : EDITORIAL*
1587	366	**Potential implementation issues**	**European Union** Reference could be provided to guidance on fumigation (e.g. calculation of volumes if appendix 3 is not included). The IC should consider whether additional guidelines in manuals is needed. Such guidance could include a description of the calculation of PPM in addition to the formula for CT in paragraph 155. SC and TPPG should consider description of the calculation of ppm (CTn,n+1 = …) additionally to formula in paragraph 155 and its inclusion in manual by taking into account

#	Para	Text	Comment
			factors such as elevation, temperature, humidity, and its impact on calculation. *Category : TECHNICAL*
1588	366	**Potential implementation issues**	**Saint Vincent and The Grenadines** Guidance to NPPOs on safely handling/inspecting consignments that had been fumigated or potentially were fumigated *Category : SUBSTANTIVE*
1589	366	**Potential implementation issues**	**EPPO** Reference could be provided to guidance on fumigation (e.g. calculation of volumes if appendix 3 is not included). The IC should consider whether additional guidelines in manuals are needed. *Category : TECHNICAL*
1590	366	**Potential implementation issues**	**Trinidad and Tobago** Guidance to NPPOs on safely handling/inspecting consignments that had been fumigated or potentially were fumigated *Category : SUBSTANTIVE*
1591	366	**Potential implementation issues**	**IPPC Regional Workshop Caribbean** Guidance to NPPOs on safely handling/inspecting consignments that had been fumigated or potentially were fumigated *Category : SUBSTANTIVE*
1592	367	This section is not part of the standard. The Standards Committee in May 2016 requested the Secretariat to gather information on any ~~potential implementation issues~~ potential implementation issues related to this draft. Please provide details and proposals on how to address these potential implementation issues.	**Ozone Secretariat** 1. NZ runs a full approval (web listed) and audited system for treatment providers undertaking all types of official treatments. The proposed IPPC standard would require some small adjustments to proceedures. 2. It would assist regulators and fumigators to maintain a high standard of fumigation performance and compliance with trading country requirements by providing: - capacity-building assistance to regulatory officers in respect to registering, monitoring and auditing fumigation companies. - providing best practice fumigation training.would improve the technical expertise of fumigators and regulatory officers. *Category : SUBSTANTIVE*
1593	367	This section is not part of the standard. The Standards Committee in May 2016 requested the Secretariat to gather information on any potential implementation issues related to this draft. Please provide details and proposals on how to address these potential implementation issues.	**New Zealand** NZ runs an full approval (web listed) and audited system. Training in all aspects of the standard would be very beneficial to some countries. *Category : TECHNICAL*