

Requirements for the use of modified atmosphere treatments as a phytosanitary measure (2014-006)

IPPC first consultation

1 July to 30 September 2018

IPPC Secretariat
2018 IPPC Regional Workshop



Background

IPPC
Secretariat
(2013)

- Call for topics in 2013: proposals for the development of requirements for phytosanitary treatments

CPM-9
(2014)

- Added the topic in April 2014 (Priority1)

SC May
2015

- approved **Specification 62** (*Requirements for the use of modified atmosphere treatments as phytosanitary measures*)

TPPT
2017

- First draft

TPPT
2018

- Draft revision

SC May
2018

- Approval of the draft ISPM for first consultation



General Considerations

Reason for the ISPM:

Modified atmosphere treatment is used for other purposes than as phytosanitary measure

Modified atmosphere treatment could be a good alternative phytosanitary treatment

Then technical guidance including specific guidance on the application and verification is essential for the proper application of the treatment.

Modified Atmosphere Treatments

- Altering ambient atmospheric gas concentrations
 - Without the introduction of a toxic agent
 - Increase in the carbon dioxide content
 - Reduction in the oxygen content

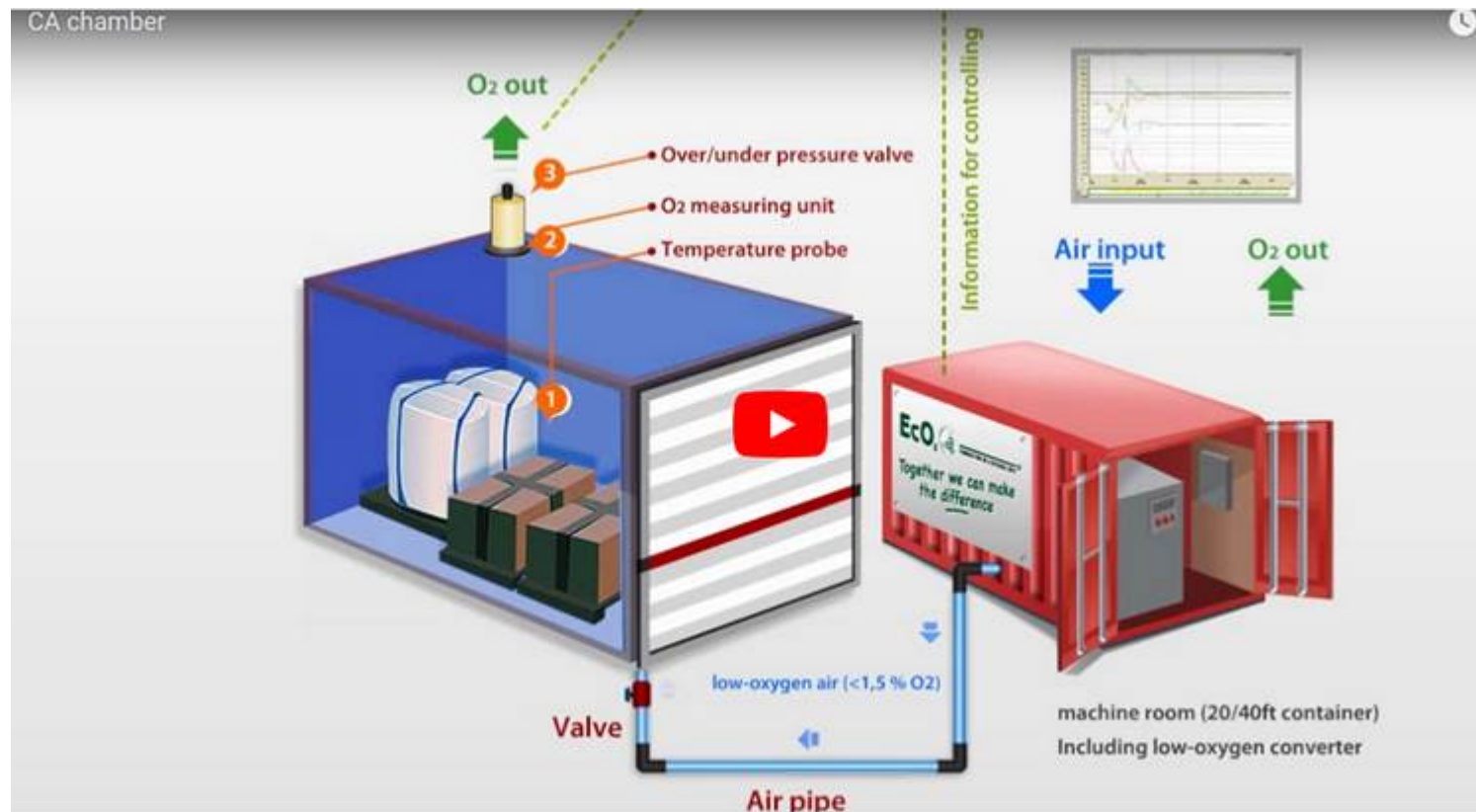
- To create an atmosphere lethal to target pests.

Methods for modifying atmospheres

Treatment atmospheres modified by:

- **changing the proportion of O₂ and CO₂** by adding CO₂ or an inert gas such as nitrogen (N₂)
- **converting O₂ to CO₂** by combustion of a hydrocarbon
- hermetic or semi-hermetic storage in which the respiration of the commodity and organisms infesting it deplete the level of O₂ and increase the level of CO₂
- **partial vacuum**, which lowers concentrations of all atmospheric gases proportionally

Treatment unit for Modified atmosphere: (air in the inclosure is replaced by low-oxygen air)



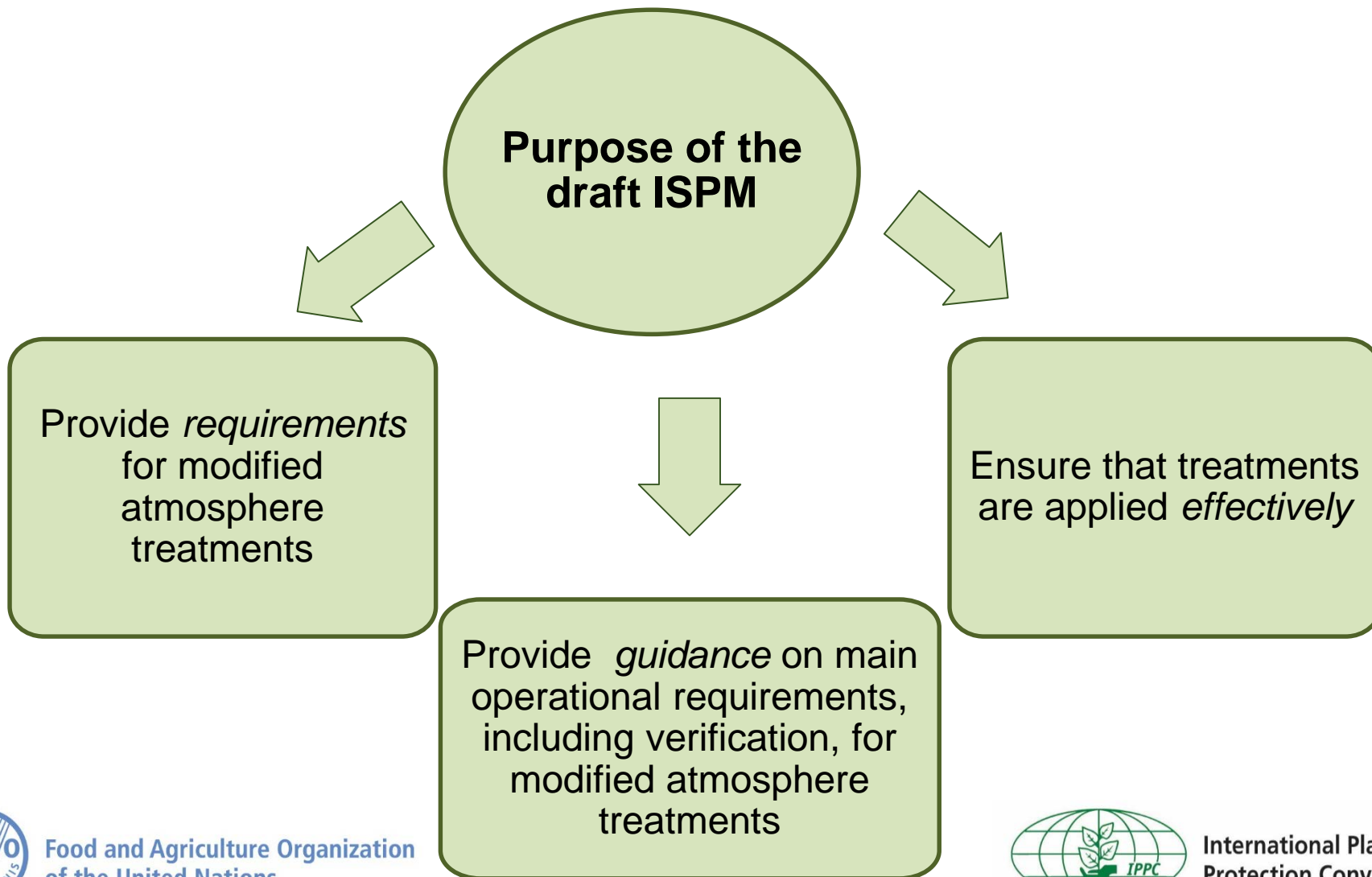
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Inside of a Modified atmosphere treatment enclosure:



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General Considerations



Major drafting issues

1. To explain in an understandable way what a modified atmosphere treatment is and how it may be applied.
2. “Treatment entities” include “treatment providers” (individuals, organizations or companies) and treatment facilities (e.g. enclosures).
3. Appendix on guidelines for efficacy research was deleted and will be included in the procedure manual for Standard setting.

Major drafting issues

4. Consistency issues with other draft ISPMs on treatment requirements: This is the third (out of 5) treatment requirement standards to go to consultation.
5. Relevant consultation comments from “Temperature Treatments Requirements (ISPM 42)” and “Fumigation Treatment Requirements (2014-04)” have already been incorporated.

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