



NAPPO

North American Plant Protection Organization
Organización Norteamericana de Protección a las Plantas

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10 **NAPPO Regional Standards for Phytosanitary Measures (RSPM)**

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20 **RSPM 41**

21 **Use of Systems Approaches in Managing Pest Risks Associated with the**
22 **Movement of Forest Products**

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1 **Publication history**

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3 *This is not an official part of the standard.*

4

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1 **Review**

2 NAPPO Regional Standards for Phytosanitary Measures are subject to periodic review
3 and amendment. The next review date for this NAPPO standard is 2022. A review of any
4 NAPPO Standard may be initiated at any time upon the request of a NAPPO member
5 country.

6
7 **Approval**

8 The Specification for this standard was approved by the North American Plant Protection
9 Organization (NAPPO) Executive Committee on **DATE**. This Standard was approved by
10 the North American Plant Protection Organization (NAPPO) Executive Committee on
11 **DATE** and is effective immediately.

12
13 **Approved by**

Marie Claude Forest
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Executive Committee Member
Mexico

14
15 **Implementation**

16 See the attached implementation plans for implementation dates in each NAPPO
17 member country.

18
19 **Amendment Record**

20 Amendments to this Standard will be dated and filed with the NAPPO Secretariat.

21
22 **Distribution**

23 This standard is distributed by the NAPPO Secretariat to the Industry Advisory Group
24 (IAG) and Sustaining Associate Members, the Secretariat of the International Plant
25 Protection Convention (IPPC) and to other Regional Plant Protection Organizations
26 (RPPOs).

1 **Introduction**

2 **Scope**

3 This standard provides NAPPO member countries with guidance on the use of integrated
4 measures (i.e. systems approaches) to mitigate pest risks associated with the movement
5 of round wood, sawn wood, wood chips and other wood commodities. This standard
6 excludes wood packaging material, wood, and commodities produced from wood which
7 have undergone sufficient processing or treatment to meet the phytosanitary
8 requirements of the NPPO of the importing country.

9

10 **References**

11 ISPM 4. 1995. *Requirements for the establishment of pest free areas*. Rome, IPPC,
12 FAO.

13 ISPM 5. (Updated annually). *Glossary of phytosanitary terms*. Rome, IPPC, FAO.

14 ISPM 10. 1999. *Requirement for the establishment of pest free places of production and*
15 *pest free production sites*. Rome, IPPC, FAO.

16 ISPM 13. 2016. *Guidelines for the notification of non-compliance and emergency action*.

17 ISPM 14. 2002. *The use of integrated measures in a systems approach for pest risk*
18 *management*. Rome, IPPC, FAO.

19

20 **Definitions**

21 Definitions of phytosanitary terms used in the present standard can be found in ISPM 5.

1

2 **Background**

3 Countries rely on a limited number of phytosanitary measures (ISPM 5: Updated
4 annually) to manage the pest risks associated with the international movement of wood.

5 In particular, heat treatments or methyl bromide fumigation treatments are widely used
6 in pest risk management of several traded wood commodities. The access to methyl
7 bromide is diminishing in response to the Montreal Protocol and heat treatment is not
8 practical for many end-uses or specific wood species.

9 A systems approach (ISPM 14: 2002), which combines multiple measures to address
10 pest risks associated with wood commodities, may provide a more effective or practical
11 option for risk management in the movement of wood commodities. Integrated measures
12 may address pest risks that are not fully managed by a single measure or may provide
13 additional options for facilitating trade which may be impacted by the lack of appropriate
14 measures.

15

16 **Outline of Requirements**

17 This standard describes the available measures and their integration as well as the
18 oversight needed in the application of a systems approach. Integrated measures applied
19 during pre-harvest, harvest, transportation and/or production will significantly reduce the
20 risk of regulated pests moving with wood commodities.

21

1. General Requirements

2. Basis for Regulating

Commodities produced from wood which have not undergone sufficient processing or treatment to remove, kill, or render pests unable to cause unwanted phytosanitary impacts may provide a pathway for the introduction and spread of regulated pests. Systems approaches (SA) integrate different risk management measures, at least two of which act independently, and which cumulatively reduce pest risk as compared to the application of a single measure. The identification of specified pest risks and the application of multiple measures integrated into a SA may reduce risks to an acceptable level, thus facilitating safe international trade.

11

2. Specific Requirements

Measures may be applied during pre-harvest production, harvest, post-harvest production, processing, pre-shipping storage, transport and/or post-shipping. Specific measures should be negotiated between the NPPOs of the importing and the exporting countries and may include:

- applying silvicultural techniques (e.g., thinning, stump treatments, roguing);
- selecting harvesting or processing sites as a basis for identification of pest free areas (ISPM 4: 1995), pest free places of production or pest free production sites (ISPM 10: 1999)
- harvesting methodologies;
- safeguarding the wood commodities in a manner that prevents infestation or re-

- 1 infestation during post-harvest, transportation or processing;
- 2 ● selecting tree species or cultivars at time of planting or at time of harvest in order
- 3 to limit pest infestations;
- 4 ● conducting inspections at harvest and post-harvest log grading to remove
- 5 infested round wood;
- 6 ● debarking, sawing or trimming to mitigate the risks associated with certain pests;
- 7 ● conducting inspection or testing during processing to remove infested material;
- 8 ● applying treatments such as chemical(s), heat or drying following primary
- 9 processing or prior to any remanufacturing to mitigate specific regulated pests;
- 10 ● auditing to validate integrated measures or to verify system integrity.

11

12 **2.1. Developing Systems Approaches**

13 The development of the systems approach may be undertaken by the NPPO of the

14 importing or exporting country, or, ideally, through the cooperation between both

15 NPPOs. The process of developing a systems approach may include consultation with

16 industry, the scientific community, and trading partner(s). However, the NPPO of the

17 importing country decides the suitability of the systems approach in meeting its

18 appropriate level of protection, subject to consideration of technical justification, minimal

19 impact, transparency, non-discrimination, equivalence and operational feasibility.

20 A systems approach may include measures that are added or strengthened to

21 compensate for uncertainty due to data gaps, variability, or lack of experience in the

22 application of measures. The level of such compensation included in a systems

1 approach should be commensurate with the level of uncertainty after appropriate
2 communication between NPPOs.

3 Experience and the provision of additional information may provide the basis for
4 renewed consideration of the number and strength of measures with a view to modifying
5 the systems approach accordingly.

6 The development of a systems approach (SA) involves:

- 7 ● obtaining, from a pest risk analysis (PRA), the nature of the pest risk(s) and the
8 description of the pathway identifying where, when and how phytosanitary
9 measures can be applied;
- 10 ● identifying and evaluating the individual and integrated effectiveness of measures
11 that are potential components of the system;
- 12 ● assessing the feasibility and impacts of the measures, in consultation with
13 affected stakeholders;
- 14 ● implementing the SA with documented audit and reporting procedures;
- 15 ● performing periodic reviews and appropriate modifications as negotiated between
16 the NPPOs of the importing and the exporting countries.

17

18 **2.1.1. Requirements of the Entities Responsible for the Forest Product**

19 **Production System in the Exporting Country**

20 The entities responsible for the forest product production system should:

- 21 ● develop and maintain a production manual which specifies the measures that
22 form part of the systems approach, including schedules for application of the

1 measures;

2 ● maintain adequate personnel, with the required training and experience to
3 consistently carry-out the activities as described in the production manual;

4 ● apply measures as specified in the production manual;

5 ● maintain detailed records on measures taken to keep the commodity free from
6 regulated pests for the importing country, including information on pests found
7 and corrective actions taken for a period negotiated between the NPPOs of the
8 exporting and importing countries;

9 ● designate a point of contact responsible for communicating with the NPPO of the
10 exporting country;

11 ● notify the NPPO of the exporting country if any regulated pests are found in the
12 production system;

13 ● undergo inspections and audits;

14 ● address any non-compliances and non-conformances;

15 ● document corrective measures taken.

16

17 **2.1.2. Production Manual**

18 The NPPO of the exporting country is responsible for ensuring that all participating
19 entities have developed, implemented, and maintained approved production manuals.

20 The production manual describes the requirements, elements, processes, and
21 operational systems that make up the systems approach used by each entity. If the

1 manual is amended to reflect a proposed change in production practices it should be
2 resubmitted for approval by the NPPO of the exporting country.

3 In situations where multiple entities are involved in the harvest and production of a
4 regulated forest product, roles and responsibilities of each entity relative to the
5 requirements of the systems approach should be clearly defined from point of harvest to
6 point of export.

7 The production manual may include but is not limited to the following elements:

- 8 • description of the organizational structure and responsibilities of the relevant
9 personnel, including name and position of the person designated as responsible
10 for the performance of the systems approach (SA);
- 11 • procedures associated with maintaining relevant records for the measures in the
12 SA for the period negotiated between the NPPOs of the exporting and importing
13 countries;
- 14 • procedures used to ensure the competency of staff responsible for implementing
15 the SA;
- 16 • description of the measures that are part of the SA including but not limited to
17 place(s) of harvest and/or production; the various taxa grown, harvested and
18 processed; pest management plan; the procedures used in processing the wood,
19 procedures for treatment, storage and movement, and other pertinent factors;
- 20 • handle, segregate and trace procedures;
- 21 • procedures used by the facility to record, address, and correct non-conformances
22 that may occur during activities described in the production manual;
- 23 • description of all relevant subcontracted activities, if any (e.g. harvesting,

1 shipping, treatment).

2

3 **2.1.3. Training**

4 The production manual should describe the training of staff performing duties related to
5 the systems approach in managing pest risks associated with the movement of forest
6 products, including the specific training elements, and frequency of training or retraining
7 as agreed between the NPPOs of the exporting and importing countries. Records of all
8 training provided should be maintained.

9

10 **2.1.4. Pest Management Plan**

11 The pest management plan, included in the production manual if required, should
12 describe procedures or processes and roles and responsibilities of the implementing
13 entity and of the NPPO of the exporting country and should be designed to either prevent
14 infestations or control pests. It should include a description of the phytosanitary
15 requirements of the NPPO of the importing country and the measures that will be taken
16 to meet these requirements.

17

18 **2.1.5. Verification**

19 The NPPO of the exporting country maintains ultimate responsibility for reviewing the
20 implementation and effectiveness of the forest product systems approach (FP SA). The
21 NPPO of the importing country may audit an FP SA. Such an audit should be conducted

1 in accordance with terms agreed upon by the NPPOs of the importing and the exporting
2 countries. The frequency of verification of the FP SA should be agreed upon by the
3 NPPOs of the importing and exporting countries.

4 In cases where verification of the FP SA demonstrates that one or more of the
5 components of the FP SA do not provide adequate pest risk management, a review of
6 the FP SA should be conducted. This review may not necessarily involve the suspension
7 of the entity or of the FP SA.

8

9 **2.1.6. Traceability and Segregation**

10 Approved entities should ensure that adequate record keeping procedures are in place
11 for traceback of all critical points along the FP SA by the NPPO of the exporting country.

12 Traceability may be beneficial in circumstances such as: identifying the origin of non-
13 compliant material, responding to non-compliance notifications, expediting the
14 implementation of corrective measures, preventing future occurrences of non-
15 compliances. In cases of consolidated shipments, traceability procedures should allow
16 traceback of material to all source entities. Only articles originating from source entities
17 operating within the FP SA or otherwise meeting the phytosanitary requirements of the
18 importing country should be included in the consolidated shipment. In cases of
19 shipments including products originating from the FP SA and products otherwise
20 meeting the phytosanitary requirements of the NPPO of the importing country, the
21 products must be clearly identifiable to allow for differentiation within the shipment.

22 Entities registered with the exporting NPPO should specify how compliant wood is

1 segregated from non-compliant wood in their production manual.

2

3 **2.1.7 Non-compliance and Non-conformance**

4 A non-compliance is the failure to adhere to an Act of Law or its Regulations. A non-
5 conformance is a failure to comply with a requirement of an FP SA.

6

7 **2.1.7.1 Non-compliance**

8 Responses to non-compliances should be proportional to the risk presented and based
9 on existing bilateral agreements.

10 If regulated pests are detected on imported consignments, the NPPO of the exporting
11 country should be notified promptly, in accordance with ISPM 13: 2001. This will permit
12 the NPPO of the exporting country to follow up with the facility to ensure that corrective
13 actions are implemented to prevent recurrence. The NPPO of the exporting country
14 should report back to the NPPO of the importing country on corrective measures taken.
15 Should non-compliant product from a specific facility continue to be detected, the facility
16 may be suspended or terminated from participating in the program. The facility may be
17 re-instated by the NPPO of the exporting country once they demonstrate the ability to
18 maintain compliance. The NPPO of the importing country may take necessary immediate
19 corrective actions on any non-compliance identified.

20 The NPPO of the importing country may also increase the frequency of inspection, the
21 sampling rate or implement other measures to verify that the imported product is in

1 compliance. The interception of non-compliant wood products by the NPPO of the
2 importing country may result in the destruction or refused entry of the entire shipment.
3 Contingency plans may be negotiated between the NPPO of the exporting country and
4 the NPPO of the importing country in advance to ensure alternative measures are
5 available in the event that a non-compliance of the FP SA is detected.

6

7 **2.1.7.2 Non-conformance**

8 A non-conformity is any failure of products or procedures to adhere to the requirements
9 of the FP SA.

10 Two types of non-conformities are recognized, taking into account the severity of the
11 non-conformity:

- 12 ● critical non-conformities are incidents that compromise the efficacy or integrity of
13 the FP SA;
- 14 ● non-critical non-conformities are incidents that do not immediately compromise
15 the efficacy or integrity of the FP SA.

16 Non-conformities can be detected during audits or as a result of examination of
17 commodities produced under the FP SA.

18 The consequences resulting from the different types of non-conformances should be
19 negotiated between the NPPOs of the exporting and the importing countries. Detections
20 of critical non-conformances may result in the suspension of the non-conforming entity
21 from the FP SA and the immediate suspension of non-conforming exports. Detection of
22 non-critical non-conformances requires immediate corrective action. Multiple or repeated

1 non-critical non-conformances may be addressed in the same manner as critical non-
2 conformances.

3 Reinstatement should occur only once corrective action has been put into place and an
4 audit by the NPPO of the exporting country has confirmed that the non-conformities have
5 been corrected. Corrective actions may require a change to the requirements and should
6 include measures to prevent recurrence of the failures identified.

7

8 **2.1.8. Record Retention**

9 Records required under the FP SA to document the application of measures should be
10 retained by the relevant entities for the period negotiated between the NPPOs of the
11 exporting and the importing countries.

12

13 **2.2. Responsibilities of the NPPOs**

14 The NPPO of the importing country, in consultation with the NPPO of the exporting
15 country should select least trade restrictive measures for inclusion into the systems
16 approach. Alternative measures which result in an equivalent level of risk mitigation
17 should be recognized. In cases where the NPPO of the importing country agrees to
18 implement certain measures of the FP SA in their territory, they are responsible for
19 verifying the implementation of those measures in their country. NPPOs should ensure,
20 to the best of their ability, that relevant phytosanitary information is published and
21 transmitted immediately to any contracting party or parties that may be affected by such
22 measures.

1

2 **2.2.1. NPPO of the Importing Country**

3 The NPPO of the importing country should provide specific information regarding its
4 phytosanitary import requirements, including but not limited to:

- 5 ● list of regulated pests addressed by the FP SA;
- 6 ● phytosanitary import requirements including type of documentation or certification
7 required.

8 Other responsibilities of the NPPO of the importing country may include:

- 9 ● proposing improvements or alternative options for the SA;
- 10 ● auditing, which may include periodic evaluation and verification of the system,
11 product inspection, etc.;
- 12 ● reviewing and providing information to the NPPO of the exporting country on the
13 effectiveness of the FP-SA.

14

15 **2.2.2. NPPO of the Exporting Country**

16 The responsibilities of the NPPO of the exporting country may include, but are not limited
17 to:

- 18 ● registering and maintaining a list of registered entities;
- 19 ● monitoring, auditing and reporting on system effectiveness at the frequency
20 specified by the NPPO of the importing country;
- 21 ● implementing necessary corrective actions and follow-up audits when non-

- 1 conformances have been detected;
- 2 ● maintaining appropriate records as per program requirements;
- 3 ● if applicable, overseeing third parties to ensure that audits are conducted
- 4 according to program specifications;
- 5 ● providing phytosanitary certification in accordance with program requirements;
- 6 ● ensuring adequate mechanisms are in place to monitor and supervise
- 7 participating entities and any third parties overseeing the program;
- 8 ● proposing improvements or alternative options for improvement of the SA;
- 9 ● informing the NPPO of the importing country on corrective actions taken in the
- 10 case of non-compliances identified by the NPPO of the importing country.