

Japan – Measures Affecting the Importation of Apples (WT/DS245)

Recourse by the United States to Article 21.5 of the DSU

First Written Submission of the United States of America

August 20, 2004

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	PROCEDURAL HISTORY	3
III.	JAPAN’S REVISED MEASURES	4
	A. Elements of Japan’s Revised Measures	5
	B. Comparison Between Japan’s Original Measure and Its Revised Measures	7
IV.	LEGAL ARGUMENTS	8
	A. Japan’s Revised Measures Are Maintained Without Sufficient Scientific Evidence in Breach of Article 2.2 of the SPS Agreement	8
	1. Introduction and Legal Standard	8
	2. Scientific Evidence Does Not Establish That Mature, Symptomless Apple Fruit Will Transmit Fire Blight or That Apple Fruit Will Act As a Pathway for the Introduction of Fire Blight	11
	3. Japan’s Revised Measures Impose Restrictions Unsupported by Scientific Evidence	14
	A. <i>Prohibition of Fruit From Orchards in Which Fire Blight Is Detected</i>	14
	B. <i>Prohibition of Fruit From Orchards in Which Fire Blight Is Detected in a 10-Meter Buffer Zone Surrounding the Orchard</i> ..	16
	C. <i>Requirement That Export Orchards Be Inspected at the Early Fruitlet Stage</i>	17
	D. <i>Requirement That Surface of Apple Fruit be Disinfested with Sodium Hypochlorite (Chlorine)</i>	18
	E. <i>Prohibition of Imported Apple Fruit From U.S. States Other Than Washington or Oregon</i>	18
	F. <i>Prohibition of Imported Apples Unless Other Production, Harvesting, and Importation Requirements Are Met</i>	19
	B. Japan’s Revised Measures Are Inconsistent With Article 5.6 of the SPS Agreement Because They Are More Trade-Restrictive Than Required to Achieve Japan’s Appropriate Level of Protection	20
	1. Introduction and Legal Standard	20
	2. Alternative Measure: Restricting Trade to Mature U.S. Apple Fruit	22
	A. <i>A Restriction of Imports to Mature U.S. Apple Fruit Is</i>	

	<i>Reasonably Available Taking into Account Technical and Economic Feasibility</i>	22
B.	<i>A Restriction of Imports to Mature U.S. Apple Fruit Achieves Japan's Appropriate Level of Protection</i>	26
C.	<i>A Restriction of Imports to Mature U.S. Apple Fruit Would be Less Trade-Restrictive Than Japan's Current SPS Measures</i> ...	27
D.	<i>Summary With Respect to Article 5.6</i>	29
C.	Japan's Revised Measures on Imported U.S. Apple Fruit Are Inconsistent With Article 5.1 of the SPS Agreement Because They Are Not Based on a Risk Assessment	29
1.	Introduction and Legal Standard	29
2.	The 1999 PRA Does Not Evaluate the Likelihood of Entry, Establishment or Spread of Fire Blight Within Japan	31
3.	The 1999 PRA Does Not Evaluate the Likelihood of Entry, Establishment or Spread of Fire Blight According to the SPS Measures That Might Be Applied	32
4.	Summary on Article 5.1	32
D.	Japan's SPS Measures Are Non-Tariff Barriers Maintained in Breach of Article XI of GATT 1994 and Article 4.2 of the <i>Agreement on Agriculture</i> .	33
V.	CONCLUSION	34

I. INTRODUCTION

1. On December 10, 2003, the Dispute Settlement Body (“DSB”) adopted its recommendations and rulings in *Japan - Measures Affecting the Importation of Apples*.¹ The DSB found that Japan’s phytosanitary measure on imported U.S. apples² was inconsistent with Articles 2.2 and 5.1 of the *Agreement on the Application of Sanitary and Phytosanitary Measures* (“SPS Agreement”). Central to these findings were two sets of conclusions about the scientific evidence. The first set of conclusions is that the scientific evidence does not establish that *mature, symptomless* apple fruit:

- a) will be infected by fire blight;
- b) harbor endophytic populations of the fire blight-causing bacteria, *Erwinia amylovora*; or
- c) harbor epiphytic populations of bacteria capable of transmitting fire blight.³

2. The second set of conclusions is that the scientific evidence does not establish that apple fruit – *whether mature or immature* – would serve as a means or pathway of introduction of fire blight to a fire blight-free area.⁴

3. Although the reasonable period of time for Japan to comply with its obligations expired

¹ Panel Report on *Japan - Measures Affecting the Importation of Apples*, WT/DS245, adopted on 10 December 2003 (hereinafter “Panel Report”); Appellate Body Report on *Japan - Measures Affecting the Importation of Apples*, AB-2003-4, adopted on 10 December 2003 (hereinafter “AB Report”).

² The United States exports mature, and therefore symptomless apple fruit. Exported fruit is by necessity symptomless because, as noted by the panel, “[i]f an immature apple is infected, it *will not* develop into a mature, healthy-looking fruit. If it does, then it is likely that the bacteria will not have developed.” Panel Report, paras. 8.138-8.139 (emphasis added). Exported fruit is mature because it is harvested after it has reached physiological maturity. See “Pre-Harvest and Post-Harvest Storage, Grading, and Handling Practices of Apples” (Exhibit USA-1). The panel determined that the concept of physiological apple fruit maturity “is relatively well defined as the moment when the apple fruit is at a stage where it will ripen even if detached from the tree,” thereby concluding that “it is scientifically possible to differentiate between mature and immature apples.” Panel Report, para. 8.113.

³ Panel Report, para. 8.171, 8.136.

⁴ Panel Report, paras. 8.136, 8.168, 8.171, 8.176.

on June 30, 2004, Japan has not brought its phytosanitary measure into conformity with the DSB’s recommendations and rulings. To the contrary, Japan issued a set of phytosanitary measures⁵ remarkably similar to the elements of its previous WTO-inconsistent apple import regime. To address Japan’s continuing breach of its SPS Agreement obligations, the United States requested that this Panel be convened pursuant to Article 21.5 of the *Understanding on Rules and Procedures Governing the Settlement of Disputes* (“DSU”).

4. The new measures encompass almost all of the substantive elements of Japan’s WTO-inconsistent import regime for U.S. apple fruit. Under both the previous regime and the revised measures, apple fruit imports are restricted to fruit grown in designated fire blight-free orchards that are surrounded by fire blight-free buffer zones, both of which must be inspected by U.S. and Japanese officials to confirm the absence of fire blight. Further, both regimes require, *inter alia*, that apple fruit be:

- a) surface-treated with sodium hypochlorite;
- b) segregated post-harvest from fruit destined for other markets; and
- c) packaged in a facility that has been sterilized with chlorine.

In short, while the revised measures purport to take into account the DSB’s recommendations and rulings, the substance of the measures remains unchanged. In particular, the trade-restrictive nature of those measures remains, restricting access for U.S. apples to Japan’s market.

⁵ In its initial examination of Japan’s import regime for apple fruit, the panel analyzed the regime as a cumulative “measure” composed of several phytosanitary restrictions, and determined that the “measure” was maintained without sufficient scientific evidence within the meaning of Article 2.2 of the SPS Agreement. *See* Panel Report, paras. 8.11-8.20, 8.199. The United States presents Japan’s revised import regime on U.S. apple fruit as a series of “measures.” Given Japan’s minimal revision of its import regime to reflect the panel’s earlier findings, the United States considers an evaluation of the specific elements of Japan’s import regime on apple fruit and findings by this Panel on those individual restrictions to be vital to a prompt and effective resolution of this dispute.

5. Japan's cosmetic modifications to its apple import regime mirror its approach in bilateral discussions on this issue over the past twenty years. Throughout that time, the already clear scientific evidence that mature apple fruit do not pose a risk of fire blight transmission has accumulated further, but Japan's approach has not changed. It continues to protect its domestic market through restrictions that are not justified on SPS grounds. The SPS Agreement makes clear to WTO Members that such an approach is not acceptable. The United States respectfully requests that the Panel find that Japan's revised measures fail to comply with the DSB's recommendations and rulings and with Japan's obligations under the SPS Agreement.

II. PROCEDURAL HISTORY

6. On March 1, 2002, the DSB established a panel to consider the U.S. complaint relating to Japan's import regime for U.S. mature apple fruit. On July 15, 2003, the panel circulated its report finding that Japan's import regime for U.S. mature apple fruit is maintained without sufficient scientific evidence within the meaning of Article 2.2 of the SPS Agreement and that Japan's import regime was not based on a risk assessment, as required by Article 5.1 of the SPS Agreement.

7. Following Japan's appeal of these findings on August 28, 2003, the Appellate Body on November 26, 2003, issued its report upholding the panel's findings.⁶ The DSB adopted its recommendations and rulings on December 10, 2003.

8. The parties to the dispute mutually agreed that the reasonable period of time available to Japan to bring its apple fruit import regime into conformity with its obligations would expire on

⁶ AB Report, para. 243.

June 30, 2004.⁷

9. On expiration of the reasonable period of time under Article 21.3 of the DSU, the United States on July 19, 2004, requested the establishment of a panel pursuant to Article 21.5 of the DSU.⁸ Simultaneously, the United States requested authorization from the DSB pursuant to Article 22.2 of the DSU to take appropriate countermeasures and suspend concessions. On July 29, 2004, pursuant to Article 22.6 of the DSU, Japan objected to the level of suspension of concessions proposed by the United States, thereby referring the matter to arbitration.⁹

10. This Panel was established by the DSB at a meeting held on July 30, 2004, with standard terms of reference.

III. JAPAN'S REVISED MEASURES

11. On June 30, 2004, the date the reasonable period of time expired in this matter, Japan amended one of the measures establishing its import regime for U.S. apple fruit, entitled “The Detailed Rules for Plant Quarantine Enforcement Regulation Concerning Fresh Fruit of Apple Produced in the United States of America” (“Detailed Rules”).¹⁰ The Detailed Rules are one of four measures comprising Japan’s import regime for U.S. apple fruit.¹¹ The remaining three

⁷ On January 30, 2004, Japan and the United States concluded an agreement pursuant to Article 21.3 of the DSU (WT/DS245/9) on the reasonable period of time available to Japan to implement the DSB’s recommendations. The United States and Japan met on three separate occasions during the implementation period to discuss bringing Japan’s measure on U.S. apples into compliance with the SPS Agreement. The final meeting between the United States and Japan was held on June 15, 2004.

⁸ WT/DS245/11.

⁹ WT/DS245/13.

¹⁰ The June 30, 2004 Detailed Rules amend the April 1, 1997 document of the same title. (Exhibits USA-3, USA-4).

¹¹ Panel Report, para. 2.17.

measures are unchanged.¹²

A. Elements of Japan’s Revised Measures

12. Japan’s revised measures impose several restrictions on imported U.S. apple fruit in connection with fire blight or the disease-causing bacteria, *E. amylovora*:

First, fruit must be produced in fire blight-free orchards designated by the United States Department of Agriculture (“USDA”). Designation may only be made for orchards in the U.S. States of Washington and Oregon.¹³

Second, each export orchard must be free of trees infected with fire blight.¹⁴

Third, the fire blight-free orchard must be surrounded by a 10-meter buffer zone that is also free of fire blight.¹⁵

Fourth, export orchards and buffer zones must be inspected at least once a year, at the

¹² The three other measures are: (1) Plant Protection Law No. 151 (enacted May 4, 1950) (Exhibit USA-5); (2) Plant Protection Law Enforcement Regulations (enacted June 3, 1950) (Exhibit USA-6); and (3) Ministry of Agriculture, Forestry and Fisheries (“MAFF”) Notification No. 354 (March 10, 1997) (Exhibit USA-7). The panel summarized the various requirements of these measures in paragraphs 2.17 to 2.19 of its report. In particular, the panel noted that “[u]nder the Plant Protection Law and the Enforcement Regulations, importation of host plants of 15 quarantine pests, including fire blight bacteria . . . is prohibited. The legislation, however, permits Japan to decide, on a case-by-case basis, to lift the import prohibition with respect to plants and products according to certain criteria that have been established by past practice.” Further, “[p]aragraph 25 of the Annexed List to Table 2 of the Plant Protection Law Enforcement Regulations sets out conditions under which US apples may be imported into Japan: ‘Fresh fruit of apple which are shipped from the United States of America directly to Japan without calling at any port and which conform to the standards established by the Ministry of Agriculture, Forestry and Fisheries’. The relevant standards are currently set by MAFF Notification No. 354 and the related Detailed Rules.” Panel Report, paras. 2.17-2.19.

¹³ Panel Report, para. 8.25; MAFF Notification No. 354, para. 1 (“fresh apple fruits . . . must be produced in the areas designated by the U.S. plant protection authority as the areas . . . where the U.S. plant protection authority inspect for fireblight at proper times in the States of Washington and Oregon, U.S.A.”) (Exhibit USA-7).

¹⁴ Detailed Rules, § 1(1)(A) (an export orchard must be a “[f]ree area of fire blight”, which means an area that possesses “[n]o tree with fire blight symptoms.”) (Exhibit USA-3).

¹⁵ Detailed Rules, § 1(1)(B) (“Export area shall be surrounded by border zones of around 10-meter width”, whereby such border zones may possess “[n]o tree with fire blight symptoms.”) (Exhibit USA-3). The United States notes that Japan, in its amended “Detailed Rules”, has rephrased the term “buffer” zone as “border” zone. The United States is unaware of any practical difference between the two – both require that a band of fire blight-free land surround the export orchard.

early fruitlet stage, for the presence of fire blight.¹⁶ Any detection of fire blight in an export orchard or buffer zone will disqualify the orchard from exporting its apple fruit to Japan.

Fifth, harvested apple fruit must be treated with a surface disinfectant.¹⁷

Sixth, the interior of the packing facility must be disinfected with a chlorine treatment.¹⁸

Seventh, fruit intended for export to Japan must be kept separated post-harvest from other fruit.¹⁹

Eighth, U.S. plant protection officials must certify or declare that apple fruit is free of quarantine pests, not infected or infested with fire blight, and has been treated with chlorine.²⁰

Ninth, Japanese officials must confirm that U.S. officials have made the necessary certifications and that chlorine treatments and orchard designations were made properly.

¹⁶ Detailed Rules, § 1(2) (“The U.S. Authorities shall designate the orchards and border zones every year based on the result of one inspection of the orchards and border zones, in principle, at an early stage of fruit development.”) (Exhibit USA-3). The United States notes that Japan’s revised Detailed Rules are unclear about the timing of a confirmatory inspection to be conducted with Japanese officials. Accordingly, the Detailed Rules can be construed as requiring a second inspection by Japanese officials of the designated orchards and buffer zones. Whereas an earlier version of Japan’s Detailed Rules (dated August 22, 1994) clearly stated that the confirmatory inspection “is carried out at the same time with the inspection of the American authorities for the designation of the orchards prior to the harvest”, the version of the Detailed Rules at issue in this dispute contains no such qualifying statement, stating simply that a “Japanese official shall confirm the designated orchards with the US Authorities every year.” (Exhibits USA-4, USA-3).

¹⁷ MAFF Notification No. 354, para. 4(3) (“As a treatment for fireblight, the fruit surface must be sterilized.”) (Exhibit USA-7); Detailed Rules § 5(1)(C) (“Fresh apple fruits shall be treated with dipping them in the solution of sodium hypochlorite (100 ppm or more chlorine is available) for more than one minute for the purpose of the sterilization of the surface of those fresh apple fruits against fire blight.”) (Exhibit USA-3).

¹⁸ Detailed Rules, § 3(2)(C) (the interior of the packing facility “shall be disinfected with solution of sodium hypochlorite etc. prior to the use and whenever necessary.”) (Exhibit USA-3).

¹⁹ Detailed Rules, § 6(1) (stating that packages of apples “shall be kept separately from other cargos than for Japan.”) (Exhibit USA-3). In addition, as noted in footnote 14 above, fruit must be shipped “directly to Japan without calling at any port” in accordance with the Plant Protection Law Enforcement Regulations.

²⁰ MAFF Notification No. 354, para. 3 (Exhibit USA-7); Detailed Rules, § 5 (Exhibit USA-3).

Japanese officials also inspect the disinfestation and packing facilities as well as each shipment of apple fruit on entry into Japan.²¹

B. Comparison Between Japan’s Original Measure and Its Revised Measures

13. Japan’s original, WTO-inconsistent measure consisted of 10 elements.²² Instead of opting to bring its measure into conformity with the DSB’s recommendations and rulings, Japan merely chose to alter certain restrictions and eliminate only one of the measure’s several elements. Specifically, the revised measures require one inspection of the orchard and buffer zone at the early fruitlet stage (as opposed to three growing season inspections), eliminate the requirement that shipping crates be fumigated, and reduce the size of the buffer zone to 10 meters (from 500 meters). The revised measures are essentially the same as their predecessor, demonstrating Japan’s failure to bring its measures into compliance with the DSB’s recommendations and

²¹ MAFF Notification No. 354, para. 3 (Exhibit USA-7); Detailed Rules, §§ 1(5), 4(1), 5(1), 5(2), 5(3), 5(4), 8(1) (Exhibit USA-3). Interestingly, despite the DSB’s findings regarding apple fruit maturity, the Detailed Rules and MAFF Notification No. 354 continue to require inspections of disinfestation and packing facilities, confirmation of orchard inspections for fire blight-freedom, and inspection of apple fruit based on pest-freedom rather than on apple fruit maturity.

²² The panel concluded that Japan’s original measure consisted of the following ten elements: “(a) Fruit must be produced in designated fire blight-free orchards. Designation of a fire blight-free area as an export orchard is made by the United States Department of Agriculture (USDA) upon application by the orchard owner. Any detection of a blighted tree in this area by inspection will disqualify the orchard. For the time being, the designation is accepted only for orchards in the states of Washington and Oregon; (b) the export orchard must be free of plants infected with fire blight and free of host plants of fire blight (other than apples), whether or not infected; (c) the fire blight-free orchard must be surrounded by a 500-meter buffer zone. Detection of a blighted tree or plant in this zone will disqualify the export orchard; (d) the fire blight-free orchard and surrounding buffer zone must be inspected at least three times annually. U.S. officials will visually inspect twice, at the blossom and fruitlet stages, the export area and the buffer zone for any symptom of fire blight. Japanese and U.S. officials will jointly conduct visual inspection of these sites at harvest time. Additional inspections are required following any strong storm (such as a hail storm); (e) harvested apples must be treated with surface disinfection by soaking in sodium hypochlorite solution; (f) containers for harvesting must be disinfected by a chlorine treatment; (g) the interior of the packing facility must be disinfected by a chlorine treatment; (h) fruit destined for Japan must be kept separated post-harvest from other fruit; (i) US plant protection officials must certify that fruits are free from fire blight and have been treated post harvest with chlorine; and (j) Japanese officials must confirm the US officials’ certification and Japanese officials must inspect packaging facilities.” Panel Report, para. 8.25.

rulings and to take into account available scientific evidence and its obligations under the SPS Agreement. Japan’s revised measures are discussed in greater detail below.

IV. LEGAL ARGUMENTS

14. The fact that this Panel has been established under Article 21.5 of the DSU carries with it certain consequences. Of most immediate relevance to the legal arguments of the parties is the consequence that, as the Appellate Body has made clear, an Article 21.5 panel “conduct[s] its work against the background of the original proceedings, and with full cognizance of the reasons provided by the original panel. The original determination and original panel proceedings, as well as the redetermination and the panel proceedings under Article 21.5, form part of a continuum of events.”²³ It is well established that adopted panel and Appellate Body reports “are treated as a final resolution to a dispute between the parties to that dispute.”²⁴

15. As discussed in detail below, Japan’s revised measures breach several provisions of the SPS Agreement, namely Articles 2.2, 5.6 and 5.1.²⁵

A. Japan’s Revised Measures Are Maintained Without Sufficient Scientific Evidence in Breach of Article 2.2 of the SPS Agreement

1. Introduction and Legal Standard

16. The DSB found that Japan’s phytosanitary measure on imported U.S. apple fruit was maintained without sufficient scientific evidence in violation of Article 2.2 of the SPS

²³ *Mexico - Anti-Dumping Investigation of High Fructose Corn Syrup (HFCS) from the United States* (21.5) (WT/DS132/AB/RW), para. 121 (“HFCS”).

²⁴ *European Communities - Anti-Dumping Duties on Imports of Cotton-Type Bed Linen from India* (21.5) (WT/DS141/AB/RW), paras. 91-93. *See also United States - Import Prohibition of Certain Shrimp and Shrimp Products* (21.5) (WT/DS58/AB/RW), para. 97.

²⁵ The United States is not advancing arguments on its claims under Articles 2.3, 5.2, 5.3, 5.5, 6.1 and 6.2 of the SPS Agreement.

Agreement.²⁶ The DSB based its conclusion that Japan’s measure was maintained without sufficient scientific evidence on the panel’s careful analysis of extensive scientific evidence that did not establish that mature, symptomless apple fruit could be infected with fire blight,²⁷ endophytically infested with fire blight-causing bacteria,²⁸ or epiphytically infested with populations of bacteria capable of transmitting fire blight.²⁹ The panel had also determined that the scientific evidence does not establish that apple fruit, regardless of its maturity, would serve as a pathway for introduction of fire blight into Japan.³⁰ Notwithstanding these findings and analysis, Japan issued revised measures on imported U.S. apple fruit that retain almost all of the trade-restrictive and scientifically unfounded elements of its original, WTO-inconsistent measure. In light of available scientific evidence (which remains unchanged since the panel first reviewed this matter) and the unambiguous findings of the DSB, it is clear that Japan’s revised measures are inconsistent with Article 2.2 of the SPS Agreement because they are maintained without sufficient scientific evidence.

17. Article 2 of the SPS Agreement is entitled “Basic Rights and Obligations.” Article 2.1 declares that “Members have a right to take sanitary and phytosanitary measures necessary for the protection of . . . plant life or health, provided that such measures are not inconsistent with this Agreement.” Article 2.2 requires that Members ensure that any phytosanitary measure “is not

²⁶ Panel Report, para. 8.199; AB Report, para. 243.

²⁷ Panel Report, paras. 8.137-8.139, 8.171.

²⁸ Panel Report, paras. 8.123-8.128, 8.171.

²⁹ Panel Report, paras. 8.129-8.136, 8.171.

³⁰ Panel Report, paras. 8.168, 8.171, 8.176.

maintained without sufficient scientific evidence.”³¹ Japan’s measures are maintained without sufficient scientific evidence, in breach of Article 2.2.

18. The panel and Appellate Body in the *Japan - Varietals* dispute examined the obligation not to maintain an SPS measure “without sufficient scientific evidence”.³² Both the panel and Appellate Body interpreted the phrase consistent with its ordinary meaning (noting, for example, that the ordinary meaning of the word “sufficient” is “of a quantity, extent, or scope adequate to a certain purpose or object”), and in its context (looking in particular at Article 5.1 (there must be a rational relationship between a risk assessment and an SPS measure), Article 3.3 (a scientific justification for an SPS measure exists if there is a rational relationship between the SPS measures and available scientific evidence), and Article 5.7 (providing a qualified exemption from Article 2.2 for provisional SPS measures where “relevant” scientific evidence is insufficient)).³³ The Appellate Body confirmed the panel’s conclusion that the obligation in Article 2.2 not to maintain an SPS measure “without sufficient scientific evidence” requires that “there be a rational or objective relationship between the SPS measure and the scientific evidence.”³⁴ Furthermore, “[w]hether there is a rational relationship between the SPS measure and the scientific evidence is to be determined on a case-by-case basis and will depend upon the particular circumstances of the case, including the characteristics of the measure at issue and the

³¹ The Appellate Body has found that, by failing to base a measure on a risk assessment in violation of Article 5.1, a Member is also, by implication, acting inconsistently with Article 2.2. *Australia - Measures Affecting Importation of Salmon*, WT/DS18/AB/R, adopted 6 November 1998, paras. 137-38 (“*Australia - Salmon*”). The United States discusses the inconsistency of Japan’s fire blight measures with Article 5.1 in Section IV.C of this submission.

³² *Japan - Measures Affecting Agricultural Products*, WT/DS76/AB/R; WT/DS76/R, adopted 19 March 1999 (“*Japan - Varietals*”).

³³ *Japan - Varietals* (AB), paras. 73-80.

³⁴ *Japan - Varietals* (AB), para. 84.

quantity and quality of the scientific evidence.”³⁵

19. The panel applied the *Japan - Varietals* standard in its examination of Japan’s original fire blight measure affecting imported U.S. apple fruit. Further, it defined “scientific evidence” as “evidence gathered through scientific methods, excluding by the same token information not acquired through a scientific method”,³⁶ and concluded that “[b]y using the term ‘scientific evidence’, Article 2.2 excludes in essence not only insufficiently substantiated information, but also such things as a non-demonstrated hypothesis.”³⁷

20. Japan’s new measures subject imported U.S. apple fruit to numerous restrictive conditions in order to be eligible for import into Japan. Each of these restrictions is maintained without sufficient scientific evidence because there is no rational relationship between each restriction and the scientific evidence, *i.e.*, that mature, symptomless apple fruit will not harbor populations of *E. amylovora* bacteria capable of transmitting fire blight or serve as a pathway for introduction of fire blight. Therefore, each of these measures is maintained in violation of Article 2.2.

2. Scientific Evidence Does Not Establish That Mature, Symptomless Apple Fruit Will Transmit Fire Blight or That Apple Fruit Will Act As a Pathway for the Introduction of Fire Blight

21. The United States is unaware of any scientific evidence regarding apple fruit and fire blight that contradicts, draws into question or in any way alters the evidence examined by the panel two years ago, or the conclusions drawn from that evidence. That evidence and those

³⁵ *Japan - Varietals* (AB), para. 84.

³⁶ Panel Report, paras. 8.92, 8.101-8.103.

³⁷ Panel Report, para. 8.93.

conclusions remain equally valid in this proceeding. As before, the scientific evidence does not establish that mature, symptomless apple fruit will either be infected with or harbor endophytic populations of *E. amylovora*, nor does it establish that mature, symptomless apple fruit will be epiphytically infested with populations of *E. amylovora* bacteria capable of transmitting fire blight.³⁸ Further, the scientific evidence does not establish that apple fruit would serve as a pathway for introduction of fire blight into Japan.³⁹ To the contrary, despite the billions of apple fruit shipped internationally (the vast majority of which were shipped without SPS measures for fire blight) there is no evidence of apple fruit having introduced fire blight into a fire blight-free area.⁴⁰ Accordingly, the panel's findings are as sound today as they were almost two years ago.

22. In making its findings, the panel analyzed the scientific evidence relating to apple fruit and fire blight. Its analysis was based in part on the written and oral statements of a panel of scientific experts on the scientific evidence on fire blight and apple fruit. The scientific experts concluded that: there is no scientific evidence that mature apple fruit harbor endophytic populations of fire blight bacteria⁴¹ or that *E. amylovora* occurs as an endophyte in healthy-looking fruit;⁴² scientific evidence does not establish that a mature apple fruit could be infected

³⁸ Panel Report, paras. 8.136, 8.171.

³⁹ Panel Report, paras. 8.168, 8.171, 8.176.

⁴⁰ Panel Report, para. 8.149. The United States has shipped approximately 53.5 billion apples world-wide over the last 37 years (this statistic combines the last two years' apple exports from the U.S. (572,258MT (2002), 528,309MT (2003)) with the 48.5 billion apple fruit figure presented by the United States in 2001). See First Submission of the United States, September 4, 2002, para. 27.

⁴¹ Panel Report, para. 8.125; Panel Report, Annex 3, paras. 28, 29 (Dr. Hale), 54 (Dr. Smith), 57 (Dr. Geider), 59 (Dr. Hale), 63 (Dr. Geider), 75, 76 (Dr. Hayward), 80 (Dr. Geider), 82 (Dr. Hale), 360-363 (Drs. Geider, Hale, Hayward, Smith).

⁴² Panel Report, para. 8.126; Panel Report, Annex 3, paras. 59 (Dr. Hale), 76 (Dr. Hayward), 82 (Dr. Hale).

with fire blight;⁴³ scientific evidence demonstrates that even apple fruit that were harvested very close to sources of inoculum were not infested with significant populations of epiphytic bacteria;⁴⁴ there is no scientific evidence that, in the rare event that a mature fruit is infested with bacteria in the calyx that the inside of the apple fruit will subsequently be infected;⁴⁵ there is no scientific evidence that calyx-infested apple fruit will transmit fire blight;⁴⁶ there is no scientific evidence that mature apple fruit has ever been the means of introduction of fire blight into an area free of the disease;⁴⁷ and the scientific evidence does not establish that any pathway for introduction of fire blight via apple fruit, whether mature or immature, will be completed.⁴⁸

23. There is no new scientific evidence that would in any way affect the panel’s findings since it and the experts examined the relevant scientific data and studies. Examined in light of those findings, Japan’s revised measures fail to implement the DSB’s recommendations and rulings and remain inconsistent with Japan’s SPS Agreement obligations.⁴⁹

⁴³ Panel Report, paras. 8.138-8.139, 8.171.

⁴⁴ Panel Report, Annex 3, paras. 223-236 (Drs. Hale, Geider, Smith, Hayward).

⁴⁵ Panel Report, para. 8.117; Panel Report, Annex 3, paras. 364-367 (Drs. Geider, Hale, Hayward).

⁴⁶ Panel Report, para. 8.147.

⁴⁷ Panel Report, Annex 3, paras. 382-385 (Drs. Geider, Hale, Hayward), 332 (Dr. Hayward); Panel Report, paras. 6.20-6.23, 6.31, 6.37-6.40. The panel noted that the experts “categorically stated that there was no evidence to suggest that mature apples had ever been the means of introduction (entry, establishment and spread) of fire blight into an area free of the disease.” Panel Report, para. 8.149. Further, the panel points out, as noted by Dr. Smith, that “not only was there no evidence that fruits had ever introduced fire blight into an area, but there was no necessity to invoke such an improbable pathway since there were much more probable alternatives.” Panel Report, para. 8.149, *citing* para. 6.31.

⁴⁸ Panel Report, paras. 8.149, 8.166, 8.168, 8.171, 8.176.

⁴⁹ Given that there is no new scientific evidence, there is thus no need to consult a panel of experts in this compliance proceeding. In the initial panel proceeding, the panel and the parties questioned the experts on available scientific evidence, and the experts’ opinions and remarks were incorporated into the record. The purpose of this compliance proceeding is not to revisit and reexplore scientific evidence that has already been evaluated by the panel, but rather to determine whether or not Japan has brought its measures into conformity its obligations under the SPS Agreement. These are determinations and interpretations that can only be made by the Panel, and on which the opinion of experts has no bearing.

3. Japan’s Revised Measures Impose Restrictions Unsupported by Scientific Evidence

24. In light of the scientific evidence discussed above and the DSB findings based on that evidence, it is clear that Japan’s current measures on imported U.S. apple fruit, whether considered cumulatively or singly, are maintained without any scientific evidence, let alone sufficient scientific evidence.⁵⁰ Each of Japan’s measures is premised on the unscientific, hypothetical scenario that a pathway for introduction of fire blight via exported apple fruit can be completed. There is no scientific evidence to support the hypothesis that mature apple fruit will transmit fire blight. Reams of scientific evidence support this conclusion. This portion of the U.S. submission discusses the various measures maintained by Japan on imported U.S. apple fruit and further demonstrates the lack of a rational or objective relationship between each measure or restriction and the available scientific evidence. As will be made clear, each individual measure is maintained without sufficient scientific evidence in violation of Article 2.2 of the SPS Agreement.

A. Prohibition of Fruit From Orchards in Which Fire Blight Is Detected

25. Japan’s revised import regime for U.S. apple fruit prohibits the importation of apples from designated orchards in which any fire blight is detected. Japan maintains this measure in breach of its Article 2.2 obligations because scientific evidence does not support a requirement of fire blight-freedom. The DSB found that the scientific evidence does not establish that mature,

⁵⁰ Implicit in Japan’s new measures is the assumption that mature, symptomless apple fruit can transmit fire blight. As the United States has demonstrated and the panel has confirmed, there is no scientific basis for such an assumption.

symptomless apple fruit could be infected with, or harbor endophytic populations of fire blight-causing bacteria, nor does it establish that mature, symptomless apple fruit would harbor populations of epiphytic *E. amylovora* bacteria capable of transmitting fire blight.⁵¹ Further, the scientific evidence does not establish that apple fruit would serve as a pathway for the introduction of fire blight into Japan.⁵² Put simply, there is no scientific evidence, let alone sufficient scientific evidence, to support a measure requiring fire blight-freedom in orchards. In fact, there is no scientific evidence that even fruit from a tree infected with fire blight poses a risk of transmission of fire blight if the fruit is mature (and therefore symptomless).⁵³

26. With no scientific basis for any requirement concerning the disease status of the orchard, the unjustified and unscientific nature of Japan's measures is further demonstrated by considering that the requirement of fire blight-freedom in orchards means that a single fire blight strike on a single tree in a large export orchard would disqualify all apple fruit in the orchard, even those tens, hundreds, or thousands of meters away from the source of inoculum.

27. Further, the scientific evidence fails to establish that any pathway for introduction of fire blight via apple fruit would be completed or that mature apple fruit, which by their nature are symptomless, would be infected with fire blight or harbor populations of the bacteria capable of

⁵¹ Panel Report, paras. 8.136, 8.171. Further, on the very rare occasions that epiphytic bacteria have been isolated, they have only been identified on apple fruit from *severely* blighted orchards. See Panel Report, para. 8.147, 8.171; S.V. Thomson, *Epidemiology of Fire Blight*, in *Fire Blight: The Disease and Its Causative Agent, Erwinia Amylovora*, at 17 (2000) (J.L. Vanneste, ed.) (Exhibit USA-8).

⁵² Panel Report, paras. 8.168, 8.171, 8.176.

⁵³ Panel Report, paras. 8.189, 6.134-6.135 (Dr. Hale noted that the 2000 joint study conducted by the United States and Japan had shown that "fruit harvested from blighted trees or adjacent to blighted trees had not harboured *E. amylovora*." See R.G. Roberts, *Evaluation of buffer zone size and inspection number reduction on phytosanitary risk associated with fire blight and export of mature apple fruit*, *Acta Horticulturae* 590 (2002) (Exhibit USA-9).

transmitting fire blight. Therefore, there is no rational relationship between restricting exports to apple fruit from fire blight-free orchards and the scientific evidence. Accordingly, Japan's measure requiring fire blight-freedom in export orchards is maintained without sufficient scientific evidence within the meaning of Article 2.2.

B. Prohibition of Fruit From Orchards in Which Fire Blight Is Detected in a 10-Meter Buffer Zone Surrounding the Orchard

28. Japan's amended import regime for U.S. apple fruit also includes a measure requiring that all export orchards be surrounded by a 10-meter wide, fire blight-free buffer zone. Japan continues to require this buffer zone notwithstanding the panel's findings on the scientific evidence.⁵⁴ The panel's findings echo the statements of the experts regarding buffer zones, one of whom noted that "in the case of fire blight the possibility that fire blight should enter an orchard during a given growing season from outside the orchard . . . [and] infect fruit is *almost impossible*. . . [s]o for that reason I doubt whether a buffer zone is really necessary in the case of fire blight."⁵⁵ Another expert commented that the 2000 joint study conducted by the United States and Japan "had shown conclusively that no buffer zone of any size was justified by the existing scientific data, as fruit harvested from blighted trees or adjacent to blighted trees had not harboured *E. amylovora*."⁵⁶

29. Again, with no scientific basis for any buffer zone requirement, the unjustified and

⁵⁴ See Panel Report, paras. 8.168, 8.171, 8.176. The panel concluded that, even if scientific evidence justified a buffer zone (which it does not), a buffer zone requirement is "redundant" in light of other restrictions on apple fruit imposed by Japan. Panel Report, para. 8.192.

⁵⁵ Panel Report, Annex 3, para. 314 (Dr. Smith).

⁵⁶ Panel Report, paras. 8.189, 6.134-6.135 (Dr. Hale, citing R.G. Roberts, *Evaluation of buffer zone size and inspection number reduction on phytosanitary risk associated with fire blight and export of mature apple fruit*, Acta Horticulturae 590 (2002) (Exhibit USA-9)).

unscientific nature of Japan’s measures is further demonstrated by considering that a requirement of fire blight-freedom in a buffer zone means that trees tens, hundreds, or thousands of meters away from a potential source of inoculum would be disqualified for export to Japan. In this respect, decreasing the size of the buffer zone from 500 meters to 10 meters is a hollow gesture – fruit growing significant distances from a source of inoculum is disqualified for export in both scenarios. In light of all of the above, as well as the fact that scientific evidence does not support a restriction of fire blight-freedom generally, there is no rational or objective relationship between the requirement of a fire blight-free buffer zone and the scientific evidence that demonstrates that buffer zones are unnecessary to mitigate even a hypothetical risk of introduction of fire blight via apple fruit.

C. *Requirement That Export Orchards Be Inspected at the Early Fruitlet Stage*

30. Japan’s revised import regime for U.S. apple fruit includes a measure requiring at least one inspection of both the orchard and the buffer zone at the early fruitlet stage to ensure that the orchard and buffer zone are free of fire blight.⁵⁷ However, such a measure bears no rational or objective relationship to the scientific evidence relating to apple fruit and fire blight as analyzed by the panel.⁵⁸ The panel summarized the views of the scientific experts on the subject of inspections, noting that “[e]ven with *uninspected orchards* the experts thought the risk to Japan of the entry, establishment or spread of fire blight was *very low* as surface *E. amylovora* was

⁵⁷ As noted in Section III.A of this submission, it is not clear whether, pursuant to the June 30, 2004, amended Detailed Rules, the confirmatory inspection occurs simultaneously with the U.S. inspection or whether the confirmatory inspection occurs as a subsequent, additional inspection of each export orchard.

⁵⁸ See Panel Report, paras. 8.168, 8.171, 8.176.

found *only rarely* on apples even from *severely infected orchards*.”⁵⁹ This scientific evidence, as confirmed by the experts’ conclusion and the panel’s finding that the scientific evidence does not establish that calyx-infested apple fruit would harbor populations of bacteria capable of transmitting fire blight,⁶⁰ demonstrates that there is no rational relationship between an orchard and buffer zone inspection and the scientific evidence. Therefore, Japan’s measure requiring an orchard inspection is maintained without sufficient science for purposes of Article 2.2.

D. Requirement That the Surface of Apple Fruit be Disinfested with Sodium Hypochlorite (Chlorine)

31. Japan’s import regime for U.S. apple fruit includes a measure requiring that all apple fruit for export to Japan be surface-disinfested or sterilized by submersion in a sodium hypochlorite solution for at least one minute. Japan maintains this measure notwithstanding the panel’s findings on the scientific evidence, including its finding that mature, symptomless apple fruit would not be infested with populations of epiphytic bacteria capable of transmitting fire blight.⁶¹ A chlorine-treatment restriction bears no rational or objective relationship to such evidence. Accordingly, there is no rational relationship between Japan’s surface disinfection requirement and the scientific evidence, and Japan’s measure requiring the chlorine treatment of apple fruit for export is maintained without sufficient scientific evidence.

E. Prohibition of Imported Apple Fruit From U.S. States Other Than Washington or Oregon

32. Japan’s measure limiting imported apple fruit to the U.S. States of Washington and

⁵⁹ Panel Report, para. 8.196 (emphasis added).

⁶⁰ Panel Report, paras. 8.171, 8.176.

⁶¹ See Panel Report, paras. 8.136, 8.168, 8.171, 8.176.

Oregon is maintained without sufficient scientific evidence. Such a measure bears no rational or objective relationship to the scientific evidence relating to apple fruit and fire blight as analyzed by the panel.⁶² It does not matter, for fire blight purposes, where the apple fruit is grown.⁶³ As a result, Japan’s measure limiting eligible apple fruit to those produced in Washington and Oregon is maintained without sufficient scientific evidence within the meaning of Article 2.2.

F. *Prohibition of Imported Apple Fruit Unless Other Production, Harvesting, and Importation Requirements Are Met*

33. Japan prohibits the importation of U.S. apple fruit unless the packing facility is sterilized by a chlorine treatment and apple fruit for export to Japan are separated post-harvest from apple fruit for other destinations. Neither of these requirements bears a rational or objective relationship to the panel’s findings on the scientific evidence.⁶⁴ Put simply, there is no scientific evidence that apple fruit intended for export could be epiphytically contaminated with fire blight-causing bacteria in packing houses, much less that such contamination could then result in introduction of fire blight in Japan. Further, when viewed in light of the statements of an expert that another required Japanese post-harvest treatment – chlorine dip – alone would adequately remove any hypothetical risk of epiphytic contamination of apple fruit, it is impossible to demonstrate a rational relationship between Japan’s sterilization and separation measures and the

⁶² See Panel Report, paras. 8.168, 8.171, 8.176.

⁶³ Japan claims to restrict apple fruit imports from U.S. States other than Washington and Oregon due to other phytosanitary concerns and the fact that these other States have not submitted proper documentation to Japan regarding certain other pests or phytosanitary risks. See Panel Report, footnote 14, *citing* Japan, Response to Questions from the Panel, November 13, 2002, Question 47. Nevertheless, a lack of necessary data on other phytosanitary pests or risks does not support a fire blight-specific measure that restricts imports to apple fruit grown in Washington and Oregon based on hypothetical fire blight risks. For example, MAFF Notification No. 354 requires that apple fruit be produced “where U.S. plant protection authority inspect for fireblight at proper times in the States of Washington and Oregon, U.S.A.” MAFF Notification No. 354, para. 1 (Exhibit USA-7).

⁶⁴ See Panel Report, paras. 8.168, 8.171, 8.176.

scientific evidence.⁶⁵ Accordingly, Japan maintains its additional post-harvest measures without sufficient scientific evidence in breach of its obligations under Article 2.2.

B. Japan’s Revised Measures Are Inconsistent With Article 5.6 of the SPS Agreement Because They Are More Trade-Restrictive Than Required to Achieve Japan’s Appropriate Level of Protection

1. Introduction and Legal Standard

34. Japan’s fire blight measures are more trade-restrictive than required to achieve its appropriate level of protection. An alternative measure exists that is significantly less trade-restrictive than the nine measures currently applied by Japan on imported U.S. apple fruit, is reasonably available taking into account technical and economic feasibility, and achieves Japan’s appropriate level of protection: the restriction of imports to mature apple fruit. In light of the existence of this less trade-restrictive alternative, Japan maintains its current import regime in breach of Article 5.6 of the SPS Agreement.

35. Article 5.6 obligates WTO Members not to establish or maintain phytosanitary measures that are more trade-restrictive than required to achieve their respective appropriate levels of protection. Article 5.6 states:

Without prejudice to paragraph 2 of Article 3, when establishing or maintaining sanitary or phytosanitary measures to achieve the appropriate level of sanitary or phytosanitary protection, Members shall ensure that such measures are not more trade-restrictive than required to achieve their appropriate level of sanitary or phytosanitary protection, taking into account technical and economic feasibility.

The footnote to Article 5.6 clarifies:

For purposes of paragraph 6 of Article 5, a measure is not more trade-restrictive

⁶⁵ Panel Report, Annex 3, para. 323 (Dr. Smith) (“Indeed, it could be argued that such a disinfection treatment is quite adequate to remove the phytosanitary risk by itself.”).

than required unless there is another measure, reasonably available taking into account technical and economic feasibility, that achieves the appropriate level of sanitary or phytosanitary protection and is significantly less restrictive to trade.

36. The Appellate Body has explained that Article 5.6 and its accompanying footnote establish three elements necessary to demonstrate a violation of Article 5.6.⁶⁶ *First*, a measure must exist that “is reasonably available taking into account technical and economic feasibility.” *Second*, the measure must achieve “the Member’s appropriate level of sanitary and phytosanitary protection.” *Third*, the measure must be “significantly less restrictive to trade than the SPS measure contested.” The three elements are applied cumulatively – *i.e.*, if the complaining party fails to meet one of the elements, “the measure in dispute would be consistent with Article 5.6.”⁶⁷

37. As noted above, an alternative measure exists that meets each of the three elements necessary to demonstrate a breach of Article 5.6: the restriction of imports to mature apple fruit. The scientific evidence evaluated by the panel led to its determination that the evidence does not establish that mature, symptomless apple fruit would be infected with fire blight,⁶⁸ that infected immature apple fruit would develop into mature fruit,⁶⁹ that mature, symptomless fruit would harbor epiphytic populations of bacteria capable of transmitting *E. amylovora*,⁷⁰ or that apple fruit would serve as a pathway for the entry of fire blight into Japan.⁷¹ These findings do not support the oppressive, nine-measure import regime currently maintained by Japan. In light of the scientific evidence, Japan’s measures are more trade-restrictive than required to meet Japan’s

⁶⁶ *Australia - Salmon* (AB), para. 194; *see Australia - Salmon* (Panel), para. 8.167.

⁶⁷ *Australia - Salmon* (AB), para. 194.

⁶⁸ Panel Report, para. 8.171.

⁶⁹ Panel Report, para. 8.138.

⁷⁰ Panel Report, paras. 8.136, 8.171.

⁷¹ Panel Report, paras. 8.168, 8.171, 8.176.

appropriate level of protection, and are therefore maintained inconsistently with Article 5.6.

2. Alternative Measure: Restricting Trade to Mature U.S. Apple Fruit

38. A measure restricting imports to mature U.S. apple fruit would more than meet Japan’s appropriate level of protection for fire blight because the scientific evidence does not establish that mature, symptomless apple fruit would be infected with fire blight or harbor endophytic populations of bacteria; that mature, symptomless, apple fruit would harbor epiphytic populations of bacteria capable of transmitting fire blight; or that apple fruit, regardless of its maturity, would serve as a pathway for introduction of fire blight.⁷² As demonstrated below, a measure restricting imports to mature, and therefore symptomless, apple fruit satisfies each of the conditions of the three-prong test enumerated by the Appellate Body in *Australia - Salmon* and confirmed by the Appellate Body in this dispute.

A. A Restriction of Imports to Mature U.S. Apple Fruit Is Reasonably Available Taking into Account Technical and Economic Feasibility

39. A measure restricting imports to Japan to mature U.S. apple fruit is reasonably available taking into account technical and economic feasibility. As explained below, U.S. Federal laws and regulations already require that exported apple fruit be mature. In fact, almost all fire blight-free areas to which the United States exports apple fruit impose only a mature, symptomless fruit requirement for apples, thereby allowing U.S. apple fruit meeting U.S. export standards to be exported without the various pre-harvest restrictions or post-harvest treatments currently required for export to Japan.⁷³ The U.S. apple industry already employs a series of quality controls on

⁷² Panel Report, paras. 8.168, 8.171, 8.176.

⁷³ The United States exports apple fruit to 61 countries that impose no measures on U.S. apple fruit for fire blight, other than requiring a phytosanitary certificate indicating that the fruit is free from harmful organisms,

apple fruit that ensure their maturity in order to meet the requirements of these laws and regulations, as well as to meet the demanding standards of export markets. Because these measures are already in effect and regularly applied to U.S. apple fruit exports, a measure restricting exports to mature fruit is reasonably available and technically and economically feasible.

40. The U.S. Export Apple Act requires that exported fruit meet minimum Federal grade.⁷⁴

Exported apple fruit must currently satisfy, at a minimum, the requirements for “U.S. No. 1 grade”,⁷⁵ which require that apples are:

mature but not overripe, carefully hand-picked, clean, fairly-well formed; free from decay, internal browning, internal breakdown, bitter pit, Jonathan spot, scald, freezing injury . . . and broken skin or bruises except those which are incident to proper handling and packing[;] free from damage caused by . . . sunburn or sprayburn, limb rubs, hail, drought spots, scars, stem or calyx cracks, disease, insects, [or] damage by other means.⁷⁶

Violators of the provisions of the U.S. Export Apple Act may be debarred from receiving export certificates and fined.⁷⁷ Debarment would render a facility’s apple fruit ineligible for export,

including fire blight.

⁷⁴ U.S. Export Apple Act, 7 U.S.C. § 581 (Exhibit USA-11).

⁷⁵ Export Apples and Pears Regulations, 7 C.F.R. § 33.10 (Exhibit USA-12).

⁷⁶ United States Standards for Grades of Apples, 7 C.F.R. §§ 51.301, 51.302 (requirements for U.S. No. 1 same as for “U.S. Fancy,” except for “color, russeting, and invisible water core”). (Exhibit USA-13). For purposes of these Standards, “mature” means that “the apples have reached the stage of development which will insure the proper completion of the ripening process.” 7 C.F.R. § 51.312. As noted in Section I of this submission, the panel found that “the concept of maturity is relatively well defined as the moment when the apple fruit is at a stage where it will ripen even if detached from the tree,” thereby concluding that “it is scientifically possible to differentiate between mature and immature apples.” Panel Report, para. 8.113. Individual States may have standards that exceed the federal standards for grades. *See, e.g.*, Washington Administrative Code 16-403-140 (“Washington State standard apple grades for extra fancy or fancy shall be the equivalent to or better than the U.S. standards for grades of apples . . .”). (Exhibit USA-14).

⁷⁷ 7 U.S.C. § 586 (“After opportunity for hearing the Secretary is authorized to refuse the issuance of certificates . . . for periods not exceeding ninety days to any person who ships or offers for shipment any apples in foreign commerce in violation of any of the provisions of this chapter. Any person or any common carrier or any transportation agency knowingly violating any of the provisions of this chapter shall be fined no less than \$100.00

thereby placing the facility at dire economic risk in the event that its commercial quality controls should hypothetically fail. Fortunately, as discussed below, the risk of failure of commercial quality controls is just that – hypothetical.

41. U.S. commercial quality controls on apple fruit ensure that only mature, and therefore symptomless, apple fruit is exported from the United States. The effectiveness of such controls is evidenced by the lack of any record of a U.S. apple producer having shipped immature apple fruit. To do so would make no commercial sense for U.S. apple producers – the hypothetical shipment of immature apple fruit would be rejected by the importer, result in economic loss for the exporter, adversely affect the reputation of U.S. apple fruit in export markets, as well as potentially run afoul of the provisions of the U.S. Export Apple Act. In order to maintain the utmost level of quality, the U.S. apple industry follows strict quality control measures.

42. U.S. quality control measures for apple fruit involve several pre-harvest and post-harvest steps that ensure that the final exported product is mature apple fruit. The measures include: pre-harvest testing of soluble solids, starch-iodine and/or firmness to ensure that apple fruit meet requirements for storage as well as consumer demands; consultation with industry horticulturalists in making harvesting decisions;⁷⁸ storage on arrival at the packing facility in

nor no more than \$10,000 by a court of competent jurisdiction.”) (Exhibit USA-11); United States Regulations for Fresh Fruits, Vegetables and Other Products (Inspection, Certification, and Standards), 7 C.F.R. § 51.46 (“Any or all benefits of the act may be denied any person for any of the following reasons: . . . (d) any willful violation of the regulations in this subpart may be deemed sufficient cause for debarring the person found guilty thereof from any or all benefits of the acts, after notice and opportunity for hearing has been accorded him.”) (Exhibit USA-15).

⁷⁸ Horticulturalists are usually employees of the packing house that will eventually store and ship the harvested apple fruit. They therefore have a strong incentive to ensure that fruit is mature and will be saleable. “Pre-Harvest and Post-Harvest Storage, Grading, and Handling Practices of Apples” (Exhibit USA-1).

regular cold rooms or controlled atmosphere (“CA”) cold rooms;⁷⁹ packing according to one of two available protocols, “direct pack” or “pre-size”;⁸⁰ and inspection by Federal and/or Federally-licensed State inspectors.

43. As noted above, Federal laws and regulations establishing quality standards and maturity requirements for exported U.S. apple fruit are already in effect. U.S. apple growers and packers have, for years, complied with these laws and regulations and have met the standards of export markets by employing a series of effective commercial quality controls that ensure apple fruit maturity. The horticulturalists, machinery, trained packing facility workers and trained Federal and/or Federally-licensed State inspectors are available and utilized for U.S. exports to international markets. Therefore, a restriction of apple fruit exports to mature U.S. apple fruit is

⁷⁹ Apple fruit are generally stored at temperatures ranging from 0 degrees to 2 degrees centigrade, and at very low oxygen levels, ranging from 1 to 3 percent. Specific atmospheres may be tailored to quarantine protocols of import markets. “Pre-Harvest and Post-Harvest Storage, Grading, and Handling Practices of Apples” (Exhibit USA-1). For example, in the case of exports to Japan, apple fruit must be kept in cold storage for a minimum of 55 days to conform with a quarantine restriction on the codling moth. MAFF Notification No. 354, para. 4(1). A large-scale study examining the survival of fire blight bacteria on fruit subject to normal commercial cooling and storing by surface inoculating fruit with varying numbers of bacteria found that bacteria were eliminated on all but two fruit (out of a total of 570 inoculated fruit) after storage for 25 days at cool temperatures and 14 days at room temperature. Bacteria were only isolated from fruit that had been inoculated with extremely large numbers of bacteria – levels far higher than ever detected on mature fruit from heavily blighted orchards. See C.N. Hale & R.K. Taylor, *Effect of cool storage on survival of Erwinia amylovora in apple calyxes*, Acta Horticulturae 489, 139-143 (1999) (Exhibit USA-2).

⁸⁰ In a “direct pack” system, apple fruit are binned, washed, sorted, sized and packed into consumer packages and/or into shipping boxes. During this process, small apple fruit (which would include, in the entirely hypothetical event they were ever harvested, immature apple fruit) not suitable for the retail market are culled from the lot by one of four methods: (1) falling through an opening of an “eliminator chain”; (2) detection by optical examination; (3) detection by an electronic weighing system; or (4) should any of these three mechanical preventive steps fail to eliminate any hypothetical immature fruit, trained sorters and packers would remove them manually. The “pre-size” system separates the above “direct pack” process into two stages. In the first stage, apple fruit are binned, sorted and sized. The apple fruit are then transferred back to bins for storage and packing at a later date (usually when an order for a particular size or grade is received). When an order is received, the fruit is: submerged in water (small apple fruit removed by passing through a wire mesh); the remaining, larger apple fruit are then rinsed and placed on a sorting table, where they are inspected by trained personnel, who remove any substandard apple fruit. The apple fruit are then subjected to the same optical, electronic and human quality control steps as described in the “direct pack” system. “Pre-Harvest and Post-Harvest Storage, Grading, and Handling Practices” (Exhibit USA-1).

a measure that is reasonably available, taking into account technical and economic feasibility.

B. A Restriction of Imports to Mature U.S. Apple Fruit Achieves Japan's Appropriate Level of Protection

44. A measure restricting apple fruit imports to mature U.S. apple fruit more than achieves Japan's appropriate level of protection because, as the panel has found, scientific evidence does not establish that mature, symptomless apple fruit would be infected with or harbor endophytic populations of *E. amylovora*;⁸¹ that mature, symptomless apple fruit would be infested with epiphytic populations of *E. amylovora* capable of transmitting fire blight;⁸² or that apple fruit, regardless of its maturity, would serve as a pathway for the introduction of fire blight into Japan.⁸³ Therefore, a measure requiring shipments be mature U.S. apple fruit would meet Japan's appropriate level of protection because mature apple fruit do not present a risk of introduction of fire blight into Japan.⁸⁴

45. Scientific evidence and history support the conclusion that a mature U.S. apple fruit restriction would satisfy Japan's appropriate level of protection. This conclusion stems from the comprehensive and time-tested quality controls employed by the U.S. apple industry and the absence of evidence that, despite billions of apple fruit shipped around the globe, the United States ships anything other than mature apple fruit. The conclusion is buttressed by the absence of scientific evidence that unrestricted trade in apple fruit has ever been the means of

⁸¹ Panel Report, para. 8.171.

⁸² Panel Report, paras. 8.136, 8.171.

⁸³ Panel Report, paras. 8.168, 8.171, 8.176.

⁸⁴ Japan's appropriate level of protection is the level of protection that would allow Japan to prevent the introduction of fire blight and maintain its fire blight-free status. See 1999 PRA, § 3-3-2, at page 29 (Exhibit USA-10).

introduction of fire blight.⁸⁵ Further, even if an immature fruit hypothetically escaped U.S. quality controls, the scientific evidence does not establish that any pathway for introduction of fire blight into Japan would be completed by apple fruit, regardless of its maturity.⁸⁶ Accordingly, Japan’s appropriate level of protection would still be met even in the event of a hypothetical breakdown of U.S. quality controls.

C. A Restriction of Imports to Mature U.S. Apple Fruit Would be Less Trade-Restrictive Than Japan’s Current SPS Measures

46. A restriction of imports to mature U.S. apple fruit would be significantly less trade-restrictive than the nine-measure import regime currently maintained by Japan. The trade-restrictive effect of Japan’s measures is evidenced by extremely low-levels of U.S. apple fruit imports and the corresponding high-levels of economic risk to which U.S. apple growers are exposed.⁸⁷ The various elements of Japan’s import regime, such as fire blight-free orchards, inspections, fire blight-free buffer zones, and chlorine treatment restrict trade by eliminating mature and therefore symptomless apple fruit from export to Japan and by establishing a system under which the American apple grower places himself at heavy risk when he decides to plant an orchard for export to Japan. For example, despite making every possible effort to meet the import regime’s onerous requirements, should a single fire blight strike be detected in a grower’s orchard, or in the buffer zone surrounding the orchard for that matter (which may not even be owned or controlled by the grower), the grower’s investment is lost as his apple fruit are no

⁸⁵ Regarding the potential for failure of quality controls in general, the panel of experts noted that the risk was “remote”, “very remote”, “negligible” and “extremely low so I think altogether it is not an essential question that we have to rely on.” Panel Report, Annex 3, paras. 329, 331 (Drs. Smith and Hale), para. 330 (Dr. Geider), para. 332 (Dr. Hayward), para. 330 (Dr. Geider).

⁸⁶ Panel Report, paras. 8.168, 8.171, 8.176.

⁸⁷ The United States has not shipped any apple fruit to Japan since the 2000/2001 marketing year.

longer exportable to Japan.⁸⁸ As a result of this risk, Japan’s trade-restrictive apple fruit import regime has, over time, eliminated the incentive for U.S. growers to attempt to export to Japan, thus protecting Japanese growers from competition.

47. Under the proposed alternative of restricting trade to mature U.S. apple fruit, entire orchards will no longer be disqualified for discovery of a single fire blight strike on a tree or in a buffer zone, and all mature apple fruit would be eligible for export to Japan. If imports were restricted to mature apple fruit, American apple growers would financially be able to compete to fill orders for export to Japan.

48. The fact that Japan’s fire blight measures are more trade-restrictive than required is further evidenced by the range of alternative measures that are both less trade-restrictive and would more than achieve Japan’s appropriate level of protection.⁸⁹ For example, Japan might require the import of mature apple fruit coupled with a phytosanitary certificate or mature fruit coupled with a chlorine dip.⁹⁰ Because the scientific evidence does not establish that mature, symptomless apple fruit would be infected with, or harbor endophytic populations of *E.*

amylovora; that mature, symptomless apple fruit would harbor epiphytic populations of bacteria

⁸⁸ In addition, packing and shipping facilities are also exposed to substantial financial risk by Japan’s current import regime due to the fact that packers are often unaware at harvest-time who/where the final purchasers/export markets for their apple fruit stocks will be. Packers fill orders as they are received post-harvest from bins of mature apple fruit of various varieties from various growers. Under Japan’s current import regime, if a packer receives an order from an importer in Japan, he would have to ensure that every apple fruit in the bin of fruit from which he fills the order has met each of the import requirements maintained by Japan. This means that every orchard from which the packer obtains apple fruit must be fire blight-free, inspected, and have a buffer zone.

⁸⁹ Because these alternative measures would not be scientifically justified, and would more than achieve the level of protection, the United States is not suggesting that these measures would be consistent with the SPS Agreement. Rather, the United States is using them to illustrate that Japan’s measures are far more trade-restrictive than required.

⁹⁰ Panel Report, Annex 3, para. 323 (Dr. Smith) (“Indeed, it could be argued that such a disinfection treatment is quite adequate to remove the phytosanitary risk by itself.”).

capable of transmitting fire blight; that apple fruit would serve as a pathway for introduction of fire blight; or that, despite billions of apple fruit shipped world-wide,⁹¹ apple fruit has ever transmitted fire blight, these alternatives would by definition be less trade-restrictive than Japan's current import regime and would more than meet Japan's appropriate level of protection.

D. Summary With Respect to Article 5.6

49. A measure restricting imports of apple fruit to Japan to mature apple fruit satisfies the three elements necessary to demonstrate that Japan's current measures on imported U.S. apple fruit are more trade-restrictive than required within the meaning of Article 5.6 of the SPS Agreement. Accordingly, Japan's measures are inconsistent with its obligations under Article 5.6.

C. Japan's Revised Measures on Imported U.S. Apple Fruit Are Inconsistent With Article 5.1 of the SPS Agreement Because They Are Not Based on a Risk Assessment

1. Introduction and Legal Standard

50. In addition to breaching Articles 2.2 and 5.6 of the SPS Agreement, Japan's measures on imported U.S. apple fruit are not based on a risk assessment, and are therefore maintained in violation of Article 5.1 of the SPS Agreement. The panel found, and the Appellate Body upheld the panel's findings, that Japan's 1999 Pest Risk Analysis ("PRA") was not a risk assessment within the meaning of Article 5.1 of the SPS Agreement, and that Japan's measures were therefore not based on a risk assessment.⁹² Japan has not conducted any new risk assessments relating to fire blight and apple fruit that the United States is aware of, and continues to base its

⁹¹ Panel Report, paras. 8.136, 8.168, 8.171, 8.176.

⁹² Panel Report, paras. 8.290-8.291; AB Report, para. 243.

measures on the 1999 PRA, which does not satisfy the definition of a risk assessment for purposes of the SPS Agreement. Accordingly, Japan’s revised measures violate Article 5.1 because they are not based on a risk assessment.⁹³

51. Article 5.1 of the SPS Agreement obligates Members to “ensure that their sanitary or phytosanitary measures are based on an assessment, as appropriate to the circumstances, of the risks to human, animal, or plant life or health, taking into account risk assessment techniques developed by the relevant international organizations.” Interpreting Article 5.1 in the context of Article 2.2 of the SPS Agreement, the obligation that a phytosanitary measure be “based on” a risk assessment “requires that the results of the risk assessment must sufficiently warrant – that is to say, reasonably support – the SPS measure at stake.”⁹⁴

52. Paragraph 4 of Annex A (Definitions) of the SPS Agreement provides further context for Article 5.1 by defining two types of risk assessment. The definition relevant to Japan’s measures defines a “risk assessment” as “[t]he evaluation of the likelihood of entry, establishment or spread of a pest or disease within the territory of an importing Member according to the sanitary or phytosanitary measures which might be applied, and of the associated potential biological and economic consequences.” In light of this definition, the panel determined that, in order to be consistent with Article 5.1, a risk assessment must:

(1) *identify* the diseases whose entry, establishment or spread a Member wants to prevent within its territory, as well as the potential biological and economic consequences associated with the entry, establishment or spread of these diseases;

⁹³ As noted in Section IV.A.1, by failing to base a measure on a risk assessment in violation of Article 5.1, a Member is also, by implication, acting inconsistently with Article 2.2. *Australia - Salmon* (AB), paras. 137-138.

⁹⁴ *European Communities - Measures Concerning Meat and Meat Products (Hormones)*, WT/DS26/AB/R, adopted February 13, 1998, para. 193 (“*EC - Hormones*”).

(2) evaluate the likelihood of entry, establishment or spread of these diseases, as well as the associated potential biological and economic consequences; and

(3) evaluate the likelihood of entry, establishment or spread of the diseases according to the SPS measures which might be applied.⁹⁵

The United States does not contest the first element, recognizing that Japan has identified fire blight as the disease at issue and recognizing the potential consequences associated with the entry, establishment or spread of fire blight. However, Japan does not meet the other two elements to be consistent with Article 5.1.

2. The 1999 PRA Does Not Evaluate the Likelihood of Entry, Establishment or Spread of Fire Blight Within Japan

53. The panel found, and Appellate Body upheld the panel’s finding, that Japan’s 1999 PRA “does not evaluate the likelihood of entry, establishment or spread of fire blight through the importation of apple fruit, as foreseen in Article 5.1 and Annex A, paragraph 4, of the SPS Agreement.”⁹⁶ The panel concluded that the 1999 PRA, “to the extent that it might be considered to identify the potential for each of the relevant steps to be completed . . . fails . . . to provide more than an indication of a potential for entry, establishment or spread, and does not assess the probability for such events to occur, as required under Article 5.1.”⁹⁷ In addition, the panel highlighted the experts’ criticisms of the 1999 PRA, noting that it overlooked several key steps regarding the probability for entry of fire blight, including: identification of relevant pathways; the probability of fire blight being associated with the pathway of origin; the probability of survival of bacteria during transportation and storage; the probability of fire blight surviving pest

⁹⁵ Panel Report, para. 8.250, citing *Australia - Salmon* (AB), para. 121 (italics in original).

⁹⁶ Panel Report, para. 8.280; AB Report, para. 243.

⁹⁷ Panel Report, para. 8.278.

management procedures; and the probability of transfer of fire blight to a suitable host.⁹⁸

Notwithstanding these findings, Japan continues to maintain substantially the same measures as were already found to not be based on a risk assessment.⁹⁹ Therefore, these measures continue to be maintained in breach of Article 5.1.

3. The 1999 PRA Does Not Evaluate the Likelihood of Entry, Establishment or Spread of Fire Blight According to the SPS Measures That Might Be Applied

54. The panel found, and the Appellate Body upheld the panel’s finding, that the 1999 PRA does not evaluate the likelihood of introduction of fire blight into Japan according to the SPS measures that might be applied.¹⁰⁰ Japan’s 1999 PRA fails to “identify any other risk-mitigating measures than those actually applied,”¹⁰¹ prompting the experts to comment that the 1999 PRA “appeared to prejudge the outcome of its risk assessment”¹⁰² and that it “was principally concerned to show that each of the measures already in place was effective in some respect, and concluded that all should therefore be applied.”¹⁰³ In the absence of any indication that Japan has made a new assessment of risks, there is still no evidence that Japan has assessed the risks according to the measures that might be applied. Therefore, these measures continue to be maintained in breach of Article 5.1.

4. Summary on Article 5.1

⁹⁸ Panel Report, para. 8.279, quoting Dr. Hale.

⁹⁹ The United States is not aware of any other studies that qualify as risk assessments for purposes of Article 5.1 on which Japan could base its fire blight measures.

¹⁰⁰ Panel Report, para. 8.285; AB Report, para. 243.

¹⁰¹ Panel Report, para. 8.285.

¹⁰² Panel Report, para. 8.289, quoting Dr. Hale, para. 6.177.

¹⁰³ Panel Report, para. 8.289, quoting Dr. Smith, para. 6.180.

55. The panel found, and Appellate Body confirmed, that Japan’s 1999 PRA is not a risk assessment for purposes of Article 5.1 and paragraph 4 of Annex A because, *inter alia*, it fails to evaluate the likelihood of introduction of fire blight in Japan and it fails to evaluate the likelihood of introduction of fire blight in Japan according to measures that might be applied. Because Japan has not produced – nor, in light of the absence of scientific evidence of any risk from mature fruit, could Japan produce – any new, appropriate analysis of the risk of introduction of fire blight into Japan via apple fruit, Japan’s revised measures are not based on a risk assessment as required by Article 5.1 of the SPS Agreement.

D. Japan’s SPS Measures Are Non-Tariff Barriers Maintained in Breach of Article XI of GATT 1994 and Article 4.2 of the *Agreement on Agriculture*

56. Finally, Japan’s measures are not legitimate SPS measures. Instead, they are non-tariff trade barriers in breach of Article XI of the *General Agreement on Tariffs and Trade 1994* (“GATT 1994”) and Article 4.2 of the *Agreement on Agriculture*. In particular, Article XI of the GATT 1994 states that “[n]o prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licenses or other measures, shall be instituted or maintained by any Member on the importation of any product of the territory of any other Member.” There is no dispute that Japan’s measures restrict imports of apples through means other than duties, taxes or other charges. Article 4.2 of the *Agreement on Agriculture* provides that “Members shall not maintain, resort to, or revert to any measures of the kind which have been required to be converted into ordinary customs duties, except as otherwise provided for in Article 5 and Annex 5.” According to the footnote to Article 4, measures required to be converted into ordinary customs duties “include quantitative import restrictions, variable import

levies, minimum import prices, discretionary import licensing, non-tariff measures maintained through state-trading enterprises, voluntary export restraints, and similar border measures other than ordinary customs duties.” Again, there is no dispute that Japan’s measures are restrictions on imports of apples and that these restrictions have not been tariffed.

V. CONCLUSION

57. For the foregoing reasons, the United States respectfully requests that the Panel find that:

- (1) Japan has failed to ensure that its fire blight measures are not maintained without sufficient scientific evidence and these measures are therefore inconsistent with Article 2.2 of the SPS Agreement;
- (2) Japan has failed to ensure that its fire blight measures are not more trade-restrictive than required to achieve its appropriate level of phytosanitary protection, taking into account technical and economic feasibility, and these measures are therefore inconsistent with Article 5.6 of the SPS Agreement;
- (3) Japan has failed to ensure that its fire blight measures are based on an assessment of the risks to plant life or health, and therefore these measures are inconsistent with Article 5.1 of the SPS Agreement;
- (4) Japan’s fire blight measures are non-tariff barriers maintained in breach of Article XI of GATT 1994 and Article 4.2 of the *Agreement on Agriculture*; and
- (5) Japan has failed to comply with the recommendations and rulings of the DSB.