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Plant Health  
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Service



# **Final Rule for the Importation of Mexican Hass Avocados to All States Except California, Florida, and Hawaii**

**Environmental Assessment,  
August 2004**

# Proposed Rule for the Importation of Mexican Hass Avocados to All States Except California, Florida, and Hawaii

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# I. Need for Action

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ) is amending the regulations for the importation of plants and plant products (7 Code of Federal Regulations (CFR) part 319) to allow for the importation of Hass Avocados from Mexico into the United States during the entire year.

## A. Background

In 2001, the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), amended 7 CFR 319, governing the importation of fresh Hass avocados from Mexico to the United States. The Fruits and Vegetables phytosanitary regulation contained in 7 CFR 319.56 prohibits or regulates the importation of fruits and vegetables into the United States. The regulation in 7 CFR 319.56–2ff currently allows for the importation of fresh Hass variety avocados (*Persea americana*) from Michoacan, Mexico, into the United States for distribution into approved States under permit issued in accordance with the regulations. The avocados may be imported between October 15 and April 15 of the following year. The avocados are to be distributed only in the following States: Colorado, Connecticut, Delaware, the District of Columbia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Virginia, West Virginia, Wisconsin, and Wyoming.

The imported fruit is only allowed in commercial shipments and under specific conditions established in the regulation. These conditions, including pest surveys in the approved municipalities and orchards, field sanitation practices, packinghouse procedures, shipping requirements, and various other safeguards are necessary to prevent the importation of plant pests on Hass avocados from Mexico. The regulation is designed to prevent the introduction and dissemination of fruit flies and other injurious plant pests and diseases that are new to or not widely distributed in the United States.

APHIS has responsibility for taking actions to exclude, eradicate, and/or control plant pests, including pests known to follow the pathway of Hass avocados imported from Michoacan, Mexico, under the Plant Protection Act (7 United States Code (U.S.C.) 7701 *et seq.*). APHIS has been delegated the authority to administer these statutes and has promulgated

Quarantines and Regulations (7 CFR 319) which regulate the importation of commodities and means of conveyance to help protect against the introduction and spread of harmful plant pest species, provide for the control, and minimize the economic, ecological, and human health impacts that harmful pests can cause.

Based on Mexico's recent request and review of the pest risks associated with the importation of avocados from Mexico, APHIS initially proposed to remove the distribution restrictions on Hass avocados and allow the importation of Hass avocados from Mexico into all States year round. All other conditions and safeguards currently in the regulation would remain applicable for the importation of Hass avocados from Michoacan, Mexico.

## **B. Purpose and Need for Action**

The purpose of the rule change as originally proposed, was to remove certain restrictions on the importation of Mexican Hass avocados and expand the geographic area of distribution to all States; shipping to all States year-round would be permitted.

Prior to 1914, avocados were allowed importation into the United States from Mexico. In 1914, U.S. plant health officials prohibited the importation of fresh avocados from Mexico because of the presence of avocado seed weevils (*Heilipus lauri*) in Mexico. In July 1994, Sanidad Vegetal, the plant protection branch of the Mexican Ministry of Agriculture and Water Resources, requested that APHIS allow fresh Hass avocado fruit from approved orchards in approved municipalities in the State of Michoacan, Mexico, to be imported into the northeastern United States. In response to the request from the Government of Mexico, APHIS proposed and implemented a rule to allow fresh Hass avocado fruit from Michoacan, Mexico, to be imported into the northeastern United States. A pest risk assessment was prepared to consider issues related to this request from Mexico for the importation of Hass avocados (USDA, APHIS, 1995) and the findings of that document are incorporated by reference. The Fruits and Vegetables regulation was amended and APHIS published a final rule in February 1997 to provide for fresh Hass avocado fruit grown in Mexico to be imported into the United States subject to certain conditions specified in the regulations.

The Government of Mexico has requested APHIS to further expand the importation of Hass avocados into the United States in accordance with Chapter 7, section B, Agriculture and Sanitary and Phytosanitary Measures of the North American Free Trade Agreement (NAFTA). In

responding to this request, APHIS has completed a risk assessment, Importation of Avocado Fruit (*Persea americana* Mill. var. 'Hass') from Mexico, analyzing the risks of expanding the existing avocado program. This change would include the removal of geographic and seasonal restrictions on the importation of Hass avocados from Mexico. APHIS must consider such requests according to the terms agreed to by the United States as a signatory party to NAFTA and the General Agreement on Trade and Tariffs.

APHIS considered Mexico's request and determined it is consistent with international trade agreements for facilitating trade. The Council on Environmental Quality's (CEQ) implementing regulations for the National Environmental Policy Act of 1969 (NEPA) (42 United States Code (U.S.C.) 4321 *et seq.*) requires Federal agencies to "[b]riefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact" (40 CFR 1508.9 (a)(1)). This environmental assessment (EA), Proposed Rule for Import of Mexican Hass Avocados to All States, dated March 2004, was prepared to consider the potential for environmental impacts from the proposed changes to the regulation and to allow the interested public an opportunity to comment. This EA complies with the provisions of NEPA (42 U.S.C. 4321–4327), CEQ's NEPA implementing regulations (40 CFR 1500–1508), and Executive Order 12114, Environmental Effects Abroad of Major Federal Actions.

## **II. Alternatives**

The alternatives considered within include (1) the no action alternative, which is the continuation of the importation of Hass avocados from Mexico into the United States, as stated in the current regulation, under specific conditions of entry (no change would be made to the regulation), and (2) a change to the Fruits and Vegetables regulation as proposed, that would allow for year- round importation to all States except California, Florida, and Hawaii during the first 2 years. Each is described briefly in this section and the potential impacts of each are considered in the following section.

### **A. No Action**

The no action alternative, which is simply the continuation of the importation of Hass avocados from Mexico into the United States, as stated in the current regulation (7 CFR 319.56–2ff), would remain the same.

The importation of Mexican avocados is managed using a systems approach. The current regulations allow for fresh Mexican Hass avocados to be imported from Michoacan, Mexico, into the United States for distribution to approved States and only under a permit with the following conditions:

- (a) The avocados may be imported in commercial shipments only.
- (b) The avocados may be imported only between October 15 and April 15 of the following year.
- (c) The avocados may only be distributed in the following States: Colorado, Connecticut, Delaware, the District of Columbia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Virginia, West Virginia, Wisconsin, and Wyoming.

In addition to the above conditions, other safeguarding measures are also required including field surveys, trapping activities, field sanitation, host resistance, post-harvest safeguards, winter shipping, packinghouse inspection, and port of arrival inspections.

### **1. Field Surveys**

The municipality must be approved by APHIS and surveyed at least annually and found to be free of Mediterranean fruit fly, *Ceratitis capitata*, the large avocado seed weevil, *Heilipus lauri*, the small avocado seed weevils, *Conotrachelus aguacatae*, *Conotrachelus perseae*, and the avocado seed moth, *stenoma catenifer*. Certification is dependent upon pests not being found in the municipalities. The surveys include foliage sampling, fruit cutting, and visual inspection. The surveys must be conducted during the growing season and completed prior to the harvest of the avocados.

### **2. Trapping**

Trapping must be conducted in the orchard for the fruit flies *Anastrepha ludens*, *A. serpentina*, and *A. striata*. If one fruit fly is trapped, at least 10 additional traps are set in a 50-hectare area immediately surrounding the trap find. If another fruit fly is found within 30 days in a surrounding area of 260 hectares of the initial find, malathion bait treatments must be applied in the affected orchard in order for the orchard to remain eligible to export avocados.

### **3. Field Sanitation**

It is the responsibility of the avocado grower or orchard owner to perform sanitation measures. Dead branches on avocado trees in the

orchard must be pruned and removed from the orchard. Fallen fruit must be collected and removed weekly.

**4. Host Resistance**

Hass avocados are easily identified from other varieties by their pebbly skin texture, characteristic shape and size, and black color when ripe. They offer a natural resistance to pests and are a very poor host to certain *Anastrepha spp.* found in Mexico.

**5. Post-harvest Safeguards**

Harvested avocados must be placed in field boxes or field containers that are marked with the approved orchard registration number. The avocados must be moved from the orchard to the packinghouse within 3 hours of harvest or they must be protected from fruit fly infestation until moved. At the packinghouse, the identity of the orchard must be maintained from the field boxes to the shipping containers. Prior to packing in boxes, each avocado must be cleaned of all stems, leaves, and other portions of plants, and labeled with the registration of the packinghouse. All avocados must be packed in clean, new boxes or clean plastic reusable crates. The boxes or crates must be clearly marked with the identity of the grower, packinghouse, and exporter, and a specific statement regarding States where the avocados are “not for distribution.”

The boxes of avocados must be placed in a refrigerated truck or container and remain in that truck or container under seal while in transit through Mexico to the port of first arrival in the United States. All shipments of avocados must be accompanied by a phytosanitary certificate issued by Sanidad Vegetal certifying that the conditions specified in the regulation have been met.

**6. Winter Shipping**

The current regulation limits the shipment and distribution of Mexican Hass avocados to the timeframe between October 15 and April 15 of the following year.

**7. Packing-house Inspection and Fruit Cutting**

The packinghouse must be registered with Sanidad Vegetal and must be listed as an approved packinghouse in their annual work plan as provided to APHIS. The operations of the packinghouse must meet the following conditions: (a) accept fruit only from orchards certified by Sanidad Vegetal for participation in the avocado export program, (b) all openings to the outside must be covered by screening with openings of not more than 1.6 millimeters or by some other barrier that prevents the entry of insects, (c) it must have double doors at the entrance of the facility and at the interior entrance to the avocado packing area, (d) prior to the culling process, a sample must be selected per shipment, cut and inspected by Sanidad Vegetal and found free from pests, (e) identity of the avocados



must be maintained from field boxes or containers to the shipping boxes, (f) each avocado fruit must be cleaned of all stems, leaves, and other plant parts and labeled with a packinghouse registration number, (g) the avocados must be packed in clean new boxes or plastic reusable crates and clearly marked with the identity of the grower, packinghouse, exporter, and statement of “Not for distribution in States,” (h) boxes must be placed in a refrigerated truck or refrigerated container and sealed while in transit through Mexico to the United States and, (i) any avocados that have not been packed or loaded for shipment must remain in the screened packing area. These are the current measures in 7 CFR 319.56 designed to regulate Mexican Hass avocados into the United States.

## **B. Final Rule to Allow for Importation of Hass Avocados to All States Except California, Florida, and Hawaii (Preferred Alternative)**

The final rule is very similar to the current regulation with its conditions of entry as maintained in the systems approach (a defined set of phytosanitary measures, at least two of which have an independent effect in the mitigation of pest risk associated with the movement of commodities). Currently, the regulation allows for limited importation of Hass avocados from Mexico into 31 States and the District of Columbia. Also, avocados may only be imported between October 15 and April 15 of the following year.

This alternative would change 7 CFR part 319–ff, according to the final rule, and allow the importation of fresh Mexican Hass avocados (*Persea americana* Mill. var. ‘Hass’) from Michoacan, Mexico, year-round to all States except California, Florida, and Hawaii during the first 2 years after publication of the final rule. The same mitigation measures and requirements in the current regulation for importation of Hass avocados from Mexico would remain in effect as an additional safeguard measures.

## **III. Environmental Impacts of the Action and Its Alternatives**

Environmental impacts associated with implementation of the rule would be as a result of inadvertent release and establishment of avocado plant pests, including three species of seed weevils, one species of stem weevil, one species of seed moth, and several species of exotic fruit flies. Establishment of these plant pests would present a potential threat to

U.S. agriculture. In responding to the Mexican request to remove certain restrictions on the importation of Hass avocados from the State of Michoacan, Mexico, APHIS officials prepared a pest risk assessment dated February 2004, Importation of Avocado Fruit (*Persea americana* Mill. var. 'Hass ') from Mexico.

Mexico uses a systems approach to export avocados to the United States. The pest risk analysis that supported the present regulation also supports the alternative for removal of all restrictions on the importation of Hass avocados from Mexico. The systems approach program, developed by APHIS, begins with the Mexican export requirements and adds additional phytosanitary requirements. A risk management analysis was performed on the Mexican avocado import program. This analysis concluded that the systems approach acts in a fail-safe manner in that multiple safeguards are built into the process. If one mitigation measure is not completely successful, then one of the other safeguards in place will ensure that the risk of entry of a quarantine pest into the United States into an area where it can become established is insignificant. The system will be closely monitored by APHIS, and any pest detections or irregularities will result in immediate actions within Mexico to eliminate the pest risk, including the prohibition of importing some or all avocados from Mexico.

In the highly unlikely event that an avocado pest should be introduced into the United States and threaten to become established, appropriate eradication actions within Mexico would likely be initiated. Such actions would likely involve the use of pesticides in a localized area. The area affected would likely be small because it is anticipated that any pests would be detected before they became widespread. The weevils and seed moth are specific to avocados and, thus, would only be found in association with avocado trees. The fruit flies are not as host-specific and could be located away from avocado orchards; however, areas where they are most likely to become established are regularly monitored for exotic fruit fly activity. Any analysis of possible actions against exotic pests that may become established would be extremely speculative at this time and would not serve any useful purpose.

In the unlikely event that a pest threatens to become established somewhere in the United States as a result of the importation of Hass avocados from Michoacan, Mexico, and actions are required of APHIS, an EA would be prepared to look at the site-specific details necessary to eradicate the pest. Any eradication plan or program would not be undertaken before a separate environmental process was completed.

## **IV. Special Considerations**

### **A. Environmental Justice**

Consistent with Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (59 *Federal Register* (FR) 7629–7633), and the Departmental Regulation 5600–2, Environmental Justice, dated December 15, 1997, APHIS considered the potential for disproportionately high and adverse human health or environmental effects on any minority populations. The proposed application for the importation of Hass avocados to all States will not result in adverse human health or environmental effects on any minority and low-income populations.

### **B. Protection of Children’s Health**

Consistent with Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks (62 FR 19885–19888), APHIS considered the potential for disproportionately high and adverse environmental health and safety risks to children. It was determined that no disproportionate effects on children are anticipated as a consequence of implementing the preferred alternative.

### **C. Endangered and Threatened Species**

The Endangered Species Act of 1973 (16 U.S.C. 4332 *et seq.*) requires that Federal agencies review their actions to ensure that they do not jeopardize the continued existence of a federally listed endangered or threatened species (listed species). Further, agencies are required to consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service if their actions may adversely affect federally listed species. A review of the proposed action indicates that it is not likely to adversely affect threatened and endangered species or their habitats.

## **V. Summary**

The evidence, assumptions, and conclusions of the 2004 risk assessment, Importation of Avocado Fruit (*Persea americana* Mill. var. ‘Hass’) from Mexico appear to support the proposed changes in the regulation for importation of Hass avocados. In 6 years of experience, the surveys, inspections, and fruit cuttings have not detected the presence of any insect pests in the importation of Mexican Hass avocados. The initial

EA analyzed the environmental risks associated with the importation of Mexican Hass avocados from Mexico into all States. However, as a result of public comments and considerations, the final rule will allow for the importation of Mexican Hass avocados into all States except California, Florida, and Hawaii during the first 2 years of implementing the expanded regulation. The results of the environmental assessment and risk assessment remain the same and indicate that the risk of a plant pest outbreak occurring in the United States from this action, if the proposal is adopted, is highly unlikely and, therefore, the risk to the quality of the human environment does not appear to be significant.

## VI. References

USDA, 2004. Importation of Avocado Fruit (*Persea americana* Mill. var. Hass) from Mexico. A Risk Assessment. August 2004, USDA, APHIS, PPQ, CHPST, MD.

USDA, 2004. Importation of Avocado Fruit (*Persea americana* Mill. var. Hass) from Mexico. A Risk Assessment. February 2004, USDA, APHIS, PPQ, CHPST, MD.

Miller, C.E., Green, A.S., Harabin, V., and Stewart, R.D., 1995. Risk management analysis: a systems approach for Mexican avocado. May 1995. USDA, APHIS, Riverdale, MD.

Sequeira, R., Millar, L., and Bartels, D., 2001. Identification of susceptible areas for the establishment of *Anastrepha* spp. fruit flies in the United States and analysis of selected pathways. North American Plant Protection Agency, Ottawa, Canada. (In press)

USDA, 1995. Importation of avocado fruit (*Persea americana*) from Mexico: supplemental pest risk assessment. May 1995. USDA, APHIS, PPQ, Riverdale, MD.

USDA, 1996. Importation of avocado fruit (*Persea americana*) from Mexico: supplemental pest risk assessment-Addendum I. Estimates for the likelihood of pest outbreaks based on the draft final rule. USDA, APHIS, PPQ, Riverdale, MD.

USDA, APHIS, 1999. Evaluating APHIS Programs and Activities for Ensuring Protection of Children From Environmental Health Risks and Safety Risks. APHIS Directive 5600.3, dated September 9, 1999. USDA, APHIS, Riverdale, MD.

USDA, APHIS, 2001. Information memo for the record. USDA, APHIS, PPQ, Riverdale, MD. Prepared by Michael J. Firko, Assistant Director, and Edward V. Podleckis, Senior Plant Pathologist, APHIS-PPQ-Permits and Risk Assessment, dated April 30, 2001.

## **VII. Consultation and Review**

Individuals within APHIS staffs were contacted for information or to review documents during the preparation of this EA. The staff addresses follow.

U.S. Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine  
Phytosanitary Issues Management, Unit 140  
Riverdale, MD 20737-1236

U.S. Department of Agriculture  
Animal and Plant Health Inspection Service  
Policy and Program Development  
Environmental Services, Unit 149  
Riverdale, MD 20737-1238

U.S. Department of Agriculture  
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**Finding of No Significant Impact**  
**Final Rule for Importation of Mexican Hass Avocados**  
**to All States Except California, Florida, and Hawaii**  
**Environmental Assessment, August 2004**

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), has prepared an environmental assessment (EA) that assesses potential environmental impacts of a final rule to amend the regulations governing the importations of fruits and vegetables. This is a final rule for the importation and expansion of the distribution area and shipping season of fresh Hass avocado fruit grown in Michoacan, Mexico, to be imported into all states except California, Florida, and Hawaii during the first two years subject to certain conditions. The EA, incorporated by reference in this document, is available from:

Phytosanitary Issues Management  
Plant Protection and Quarantine  
Animal and Plant Health Inspection Service  
U.S. Department of Agriculture  
4700 River Road, Unit 140  
Riverdale, Maryland 20737-1236

The initial EA analyzed two alternatives: (1) no action, and (2) final rule to allow for the importation of Hass Avocados to All States except California, Florida, and Hawaii. In the initial EA, APHIS, analyzed a proposed rule to import Mexican Hass avocados into all States at any time. As a result of the public comment process on the initial EA, APHIS considered a recommended and reasonable exception to allow for the importation of Mexican Hass Avocados to all States except California, Florida, and Hawaii during the first two years. In response to the comments received and considering the alternatives, APHIS has determined that the second alternative is its preferred alternative in that it further enhances its abilities to regulate and exclude injurious plant pests from the United States.

The analysis of this EA finds that there would be no significant impact of this action based upon the results of the 2001 Information Memo for the Record, the "Risk Management Analysis: A Systems Approach for Mexican Avocado, May 1995," and the "Importation of Avocado Fruit (*Persea americana*) from Mexico: Supplemental Pest Risk Assessment, May 1995," and the "Importation of Avocado Fruit (*Persea americana*) Mill.var. 'Hass') from Mexico: A Risk Assessment, August 2004. Any analysis of possible actions against exotic pests would be extremely speculative at this time and would not serve any useful purpose. In the unlikely event that a plant pest becomes established somewhere in the United States as a result of Hass avocados imported from Michoacan, Mexico, and actions are required of APHIS, an environmental analysis will be conducted to look at the site-specific details necessary to perform a meaningful analysis.

APHIS considered the potential environmental consequences of each alternative and determined that there would be no significant impact on the quality of the human environment from the implementation of the preferred alternative. APHIS considered the impact the final rule would have on federally listed endangered and threatened species, according to the Endangered Species

Act of 1973, and has determined that this action will have no adverse effect on endangered and threatened species.

The analysis in this EA has considered Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks. The implementation of this action will not result in disproportionately high and adverse human health or environmental effects on any minority populations and low-income populations or present any risks to the health or safety of children.

Therefore, I find that the potential risk to the quality of the environment from the final rule, if adopted, is insignificant.

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Richard L. Dunkle  
Deputy Administrator  
Plant Protection and Quarantine  
Animal and Plant Health Inspection Service

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Date