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November 28, 2011

Docket No. APHIS-2009-0100
Regulatory Analysis and Development
PPD
Animal and Plant Health Inspection Service
Station 3A-03.8
4700 River Road, Unit 118
Riverdale, MD 20737-1238

Dear Sir or Madam:

On behalf of the non-profit consumer group Food & Water Watch, I welcome this opportunity to comment on Docket No. APHIS-2009-0100, "Irradiation Treatment; Location of Facilities in the Southern United States."

Food & Water Watch has historically opposed the use of irradiation to treat food. When we were part of the consumer group Public Citizen, we opposed the rule that permitted irradiation as a phytosanitary treatment.[1] Consequently, we do not support the agency's current proposal.

We strongly oppose this proposed rule for several reasons:

1) We are not convinced that exotic pests will not escape in critical agricultural areas in the United States before imported crops are treated.

2) No one has decided to build irradiation facilities in the locations in Southern States already approved to receive imported produce.

3) Irradiation causes a depletion of nutrients in produce and could cause a public health risk.

4) Domestic producers may be adversely impacted by cheap imports.

5) Consumers have been reluctant to purchase irradiated food products.

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[1] Public Citizen. "Invasive Species: New Equivalency Provisions for Irradiation for Imported Fruits and Vegetables," Harmonization Alert, Vol. 2, No. 10. May-August 2002.

The Risk of Exotic Pest Escape

We are not convinced that exotic pests will not escape prior to imported fruits and vegetables receiving treatment at a domestic irradiation facility. The fact that the agency is requiring multiple layers of requirements that it contends will minimize the risk of exotic pests from escaping into domestic agricultural areas raises red flags to us. The document entitled, "Generic Phytosanitary Criteria for Establishing Locations for Irradiation Facilities in the Southern United States: Treatment Evaluation Document," lists ten generic criteria that must be met before the agency will approve the location of irradiation facilities in the Southern United States – all of which deal with insect escapement mitigation measures.

The document specifically singles out fruit flies as a pest that the measures need to prevent escapement. It is apparent that the agency needs to be reminded of congressional testimony provided by William Hawks, then-Under Secretary for Marketing and Regulatory Programs, on March 12, 2003 before the House Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations. In discussing the 2003 rule that permitted the location of irradiation facilities in certain parts of the United States to treat imported fruits and vegetables with Congressman Sam Farr (D-CA), the following exchange took place:

> Mr. Farr: We may have to come back in another series, Mr. Chairman. As you know, I represent a State that is very, very worried about Medflies. You have come up with a rule that allows unirradiated fruits and vegetables into 33 of the contiguous 48 states. The reason for your rule is that you say, well, in those States, if the Medfly came in, it would not survive the winter. The problem is that they stick around for the winter. These fruits and vegetables can go from these 33 states to the States that are highly at risk. I am wondering what risk assessment did you do in adapting the justification for that exemption?
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> Mr. Hawks: Mr. Farr, I don't know what you are referring to there, but I can assure you that we are not allowing any products coming in from a Medfly-infested area on a Medfly host into this country.
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> Mr. Farr: Is that including the 11 species of fruit flies?
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> Mr. Hawks: No, sir. I can assure you that we are not allowing any Medfly-infested products into this country.
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> Mr. Farr: Including the mango seed weevil? You have 11 infestation species of fruit flies, including the Medfly, the Oriental and South American fruit flies, and the mango seed weevil, among others. So that those states that import nonirradiated fruits and vegetables – you can assure us that none of those States importing that – that any of the infestations on those nonirradiated can get to the at-risk States,

> Florida, Texas, and California, which are well represented on this committee?
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> Mr. Hawks: No, sir, I cannot assure you that if a Medfly gets into Michigan that it cannot get to California, but I can assure you is that we will not allow any product to come into this country from a Medfly-infested area.
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> Mr. Farr: Why would we even allow any product to come that has not been irradiated?
>
> Mr. Hawks: There are other control measures: cold treatments, fumigation, and other. There are a number of protocols that can be used to mitigate pest risk.[2]

The current proposed rule shatters the assurances provided in 2003 regarding the possible introduction of dangerous pests into sensitive agricultural areas in the United States. Not only will the risk be increased by allowing exotic pests to be introduced, the current proposed rule would make it easier for those pests to infest key agricultural states by permitting the location of irradiation facilities to treat imported fruits and vegetables in Florida, Texas, California and Arizona.

The cost of containing and eradicating exotic pests has become a high-profile issue. Congressional hearings have focused on the increasing costs that are being borne by U.S. taxpayers to eliminate those pests that are already here. News broadcasts are also focusing considerable time to the issue. Just recently, the news magazine CBS "Sunday Morning" devoted an entire segment to the problem. In that program, Dr. David Lodge from Notre Dame University estimated that collectively, federal, state and local agencies are spending $120 billion annually combatting exotic animals, plants and insects that have reached our shores.[3] In these times of strained government budgets, it seems unconscionable that APHIS is even considering a proposal that could exacerbate such a major problem.

Lack of Response to 2002 Rule

On October 23, 2002, APHIS published a final rule that would permit irradiation as a phytosanitary measure for fruits and vegetables. It also permitted the location of domestic irradiation facilities in some 33 states with the notable exception of most areas in the southern states. It did allow, however, the construction of irradiation facilities in Wilmington, North Carolina; Gulfport, Mississippi; and the Atlanta, Georgia International

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[2] Hearing before the House Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations, March 12, 2003, p. 472.
[3] CBS Sunday Morning. "The Threat of Invasive Species," air date October 30, 2011; see http://www.cbsnews.com/8301-3445_162-20127579/the-threat-of-invasive-species/

Airport because it was argued that pest escapement could be minimized at those locations and they were major ports-of-entry for imported food products.[4]

In the last nine years since the 2002 APHIS rule went into effect, the number of food irradiation facilities in this country has actually declined. Only recently, APHIS approved a food irradiation facility in Sioux City, Iowa to treat imported mangoes from Pakistan.[5] There have been numerous news accounts since that approval was granted indicating that the arrangement is proving to be impractical since it is too costly.[6] In the narrative to the proposed rule, APHIS admits that no irradiation facilities have been constructed in Wilmington, North Carolina; Gulfport, Mississippi; or at the Atlanta, Georgia International Airport. While APHIS now claims that it has received a petition to locate an irradiation facility in McAllen, Texas, ostensibly to treat imported fruit and vegetables from Mexico, we would oppose granting that petition because we oppose irradiation as a phytosanitary measure, we do not understand why pest mitigation is not occurring the exporting nation prior to export, and we fear the introduction of exotic pests in domestic agricultural areas.

Irradiation Causes Nutrient Depletion in Fruits and Vegetables and Could Cause Public Health Risk

Raw fruits and vegetables provide a rich source of key vitamins and other nutrients. Research has shown that the irradiation of fruits and vegetables can cause nutrient depletion. Studies indicate that irradiation causes a rapid depletion of key nutrients, such as Vitamin C, Thiamin and Vitamin E. For example, studies have shown that there is an immediate reduction of between 4% and 17% in Vitamin C for certain fruit that were irradiated; and a further reduction of up to 33% after irradiated fruit were left in storage for 15 days.[7]

Furthermore, there has been a body of research that indicates that chemicals produced in fruits and vegetables that contain certain fats may be harmful to human consumption. These substances are the class of chemicals called cyclobutanones. They are often used as markers to determine whether foods have been irradiated because they do not naturally occur in foods. Of particular concern is the chemical 2-ACB that has been found to accelerate the growth of cancerous tumors in laboratory rats. Fruits are that are especially susceptible to the formation of 2-ACBs after they are irradiated are mangoes and papayas.[8] Further research needs to be conducted on the possible adverse public health effects of consuming irradiated fruits and vegetables that contain this substance, and the use of

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[4] 67 FR 65016-65029.
[5] Office of the General Counsel, United States Department of Agriculture. Response to Freedom of Information Act Request, October 21, 2011.
[6] Iqbal Mirza. "Mango Exports Facing Strict USDA Rules," Business Recorder, June 28, 2011; see http://www.brecorder.com/agriculture-a-allied/single/624/183/1206326/
[7] Food & Water Watch. "Food Irradiation and Vitamin Loss," Fact Sheet, see http://www.foodandwaterwatch.org/factsheet/food-irradiation-and-vitamin-loss/
[8] Food & Water Watch/Public Citizen. "Questioning Food Irradiation," see http://www.foodandwaterwatch.org/reports/questioning-food-irradiation/

irradiation to treat fruits and vegetables should not be encouraged until this research is completed.

Domestic Producers and U.S. Consumers May Be Adversely Impacted By Cheap Imports

APHIS has begun to approve the importation of foreign fruits and vegetables at an alarmingly increased frequency in recent years. We surmise that this has been the direct result of the approval of irradiation as a phytosanitary measure. While many of the fruits and vegetables come from tropical areas around the world and are types of produce not typically raised in large quantities in the United States (e.g., mangoes, mangosteens, longan fruit, lichee nuts, dragon fruit)[9], there is a likelihood that crops normally raised here in the United States will receive approval to be imported provided that they are subjected to irradiation. For example, sweet cherries from Australia have been approved for import and irradiation is the preferred phytosanitary measure.[10]

We fear that the use of irradiation will be expanded to treat imported fruits and vegetables commonly raised in the United States. We also fear that many of the exporting countries will not have regulatory frameworks that are comparable to what U.S producers are subjected to and irradiation will be used as the panacea to address those shortcomings. What makes the current proposed rule more objectionable is that the many of these exporting countries will not make even investments into building their own irradiation facilities -- leaving it to the United States to irradiate the imported produce that could undercut the livelihoods of our own domestic producers.

We have also become concerned that while APHIS has been approving more requests from exporting countries to ship their produce to the United States, the Food and Drug Administration has not been able to keep up with overwhelming volume of imports to ensure that they are safe for human consumption. Food & Water Watch has researched the impact of the ever-increasing volume of imported produce on our economy and U.S. consumers. We highly recommend that agency officials read our report entitled, "The Poisoned Fruit of American Trade Policy" before any more approvals for imported produce are granted.[11]

U.S. Consumers Remain Wary of Food Irradiation

Even though food irradiation has been approved as both a phytosanitary and food safety treatment since the 1980's, the volume of irradiated food consumed in the U.S. still remains

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[9] Animal and Plant Health Inspection Service, United States Department of Agriculture. "Fresh Fruits and Vegetables Import Manual."
[10] 75 FR 46901-46902
[11] Food & Water Watch. "The Poisoned Fruit of American Trade Policy," see http://www.foodandwaterwatch.org/reports/the-poisoned-fruit-of-american-trade-policy/

very small.[12] There was a major effort to make irradiated ground beef products available in the marketplace in the early 2000's, but the irradiation company that launched the effort eventually declared bankruptcy.[13] Today, there are only a handful of irradiation facilities in the United States that treat food and very little irradiated food available in the marketplace. Because irradiated food must be labeled as such, consumers are able to avoid it. While there have been efforts to weaken the labeling requirements for irradiated foods as a way to increase their acceptance, consumers have vociferously opposed changes in those regulations.

Imported Fruit from Thailand and India

For all of the reasons cited above, we also oppose the requests from Thailand and India to export fruit to the United States that would be irradiated by domestic facilities. In India's case, APHIS approved shipping irradiated mangoes to the United States in 2007.[14] India has constructed food irradiation facilities. We understand that the quality of the fruit irradiated at those facilities seriously deteriorated in transit to the United States. Since India has not been able to irradiate its fruit effectively, we do not understand why the United States would perform this task for Indian exporters.

Should you have any questions regarding our comments, please feel free to contact me.

Sincerely,

Wenonah Hauter
Executive Director

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[12] Elena Conis. "Should Food Irradiation Return to the Table," Los Angeles Times, June 19, 2011; see http://articles.latimes.com/2011/jun/19/health/la-he-food-irradiation-20110619
[13] "Lights Out for Surebeam," Food Production Daily, January 13, 2004, see http://www.foodproductiondaily.com/Processing/Lights-out-for-SureBeam
[14] 72 FR 10902-10907