

Jeff Fox:

My name is Jeff Fox (spell name). I have served as the President and Chief Executive Officer of Hazelnut Growers of Oregon, a processor of Hazelnuts here in the Willamette Valley of Oregon since 2013. I have served as a Hazelnut Marketing Board Member and Treasurer since 2013. 1983 (The company began in 1983; Mr. Fox became Pres and CEO in 2013)

On justification point 1, I concur with the prior testimony addressing the purpose of the proposal/amendment.

I would like to address justification point 2. What problem is the proposal designed to address?

Under currently accepted hazelnut production practices, hazelnut producers harvest their crop by picking up nuts off the orchard floor after the nuts have fallen naturally from the trees. Harvest methods employed by producers almost universally involve the nuts making contact with the soil. Salmonella, listeria, and E. coli pathogens are naturally present in the soil. Such pathogens, then, have the opportunity to transfer to harvested nuts under current harvesting processes. Most handlers have implemented procedures to reduce the potential pathogen load when they wash and dry the product prior to handling, but scientific research has shown these to have an inconsistent effect on pathogen reduction. In addition, many hazelnut handlers have implemented treatment processes to reduce contamination in finished merchantable product, but no industry-wide regulation exists to collectively address the potential hazard risk with proven technologies backed by scientific studies, and handlers employing such quality control steps are doing so voluntarily.

Tree nuts, including hazelnuts, have been implicated in a number of food safety incidents or recalls in recent years. There have been two hazelnut incidents. In 2009, FDA detected salmonella on equipment in an Oregon packing facility during a random inspection. Subsequent testing of product detected the pathogen on merchantable product stored in the facility. Certain lots of hazelnut kernels that had been shipped to customers were recalled out of caution. Thankfully, no illnesses were associated with the detection of the pathogen on merchantable product. Another food safety incident occurred in 2012, when a salmonella outbreak occurred in Canada with inshell hazelnuts that originated in Oregon. The outbreak caused several illnesses and a broad recall, however the origin of the pathogen was not determined.

Food safety incidents like what the hazelnut industry has experienced led Congress to enact the Food Safety Modernization Act (FSMA). Implementation of FSMA has led FDA to research and quantify the food safety risk assessment for all tree nuts, including hazelnuts. While not fully completed at this time, the hazelnut industry expects that the FDA risk assessment will result in nut industries being required to manage food safety risks by treatment processes found to achieve some level of reduction in pathogen load prior to final shipment of product. To date, the only method expected to be validated by

FDA to reduce the pathogen load in hazelnuts is via a post-harvest treatment process applied by the handler prior to shipment of product to customers.

Currently, there is no authority within the hazelnut marketing order to regulate the minimum quality of hazelnuts handled. As such, there is no ability to require the treatment of hazelnuts to reduce pathogen load prior to outgoing shipment. The Northwest hazelnut industry believes that all product sold to customers, except product that will be subject to further processing prior to its distribution and consumption or product that will be exported, should be treated by a process proven to achieve a specified log reduction of salmonella, E.coli, and listeria pathogens on the surface of both inshell hazelnuts and hazelnut kernels (including whole kernels and kernel products).

The Board believes that requiring an approved treatment process under the marketing order would help eliminate food safety incidents for hazelnuts that could result in public health issues. Food safety issues often result in long-term negative economic impacts. The direct economic impact of past food safety incidents have been the cost of recalling the affected product, transportation charges to ship all suspect product in the handler's inventory out of the production area for PPO treatment, lost production time from the plant while it was closed for sanitizing and FDA recertification to open, and lost sales over the bad press. Handlers affected by the discovery of pathogens on their product have not disclosed the level of their expenses related to those incidents, but the dollar amount is estimated to be in the hundreds of thousands. The indirect costs of a food safety incident are much harder to quantify. Lost customers, reduction in market share, and changes in consumer preference would be incredibly hard to quantify, but industry members consider the cost to be substantial.

While hazelnuts produced in Oregon and Washington are shipped to many markets throughout the world, the proposed amendment is primarily intentioned to regulate hazelnuts shipped to North America. Almost all inshell hazelnuts and a smaller percentage of kernels, shipped to the domestic market (including Canada) are destined for retail sales in a raw form. The majority of these hazelnuts are already treated to reduce the pathogen load by handlers on a voluntary basis. In addition, the hazelnut industry's food safety committee has provided handlers with sample documents to use when untreated product is shipped domestically to a receiver who will subject such product to further treatment or manufacturing prior to consumption. However, there could be instances where potential buyers of untreated product, who have no plan for further treatment or manufacturing, have pressured handlers to sell product without attesting to a treatment step. Mandatory regulation of domestic shipments would resolve that issue.

Buyers of product shipped to export destinations may have different food safety requirements or may further manufacture or treat the product with kill-step processes such as roasting, baking, or pasteurizing, so mandatory treatment of such hazelnuts may not be necessary. However, should a buyer of export product request that the hazelnuts be treated before leaving the US, assuredly a handler could voluntarily

accommodate that request, even if the product was not covered by marketing order regulations. With the ability to differentiate between markets in the application of regulation, the Board would be able to recommend the most appropriate and efficient requirements to effectuate the intent of this proposal without creating an additional, unnecessary burden on handlers.

Finally, I would like to address justification point 8. How would the proposal be implemented?

Should quality control regulation authority be added to the order, the Board would begin to evaluate if regulation is necessary to promote orderly marketing of hazelnuts and what specific requirements would be appropriate under the new authority. As an example, if it is found that product quality continues to be adversely affected by the presence of pathogens in merchantable hazelnuts, the Board could pursue implementation of quality regulation, up to and including mandatory product treatment. The Board, as a body and through designated subcommittees, would review all available scientific data on the prevalence of pathogens in hazelnuts and the certified eradication methods that have been proven to reduce pathogens in merchantable product. As appropriate, the order's regulations could be amended, via informal rulemaking, to effectuate such mandatory eradication protocols. The regulations could be crafted to regulate quality for all markets or for specific market outlets only, as the Board determined which actions would be appropriate within the context of the costs and benefits to the handlers.

If the mandatory treatment of hazelnuts to reduce the pathogen load is determined to be in the best interest of the industry, the Board would develop policies and procedures for the certification of acceptable processes, facilities, and record-keeping. It is anticipated that subcommittees would be established to serve as reviewers of such processes, treatment facilities, and handlers' treatment plans. The Board envisions that much of the organization and implementation of mandatory treatment regulations would be modeled after the almond marketing order's current mandatory treatment requirements.

I would like to re-affirm the importance of the amendment to Marketing Order No. 982 to authorize the Board to establish quality standards for the Hazelnut Industry.

