

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515-2107**

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June 1, 2012

The Honorable Margaret Hamburg  
Commissioner  
U.S. Food and Drug Administration  
10903 New Hampshire Avenue  
Silver Spring, MD 20993

Dear Commissioner Hamburg,

I write to request information relating to the long-term impacts on seafood resulting from radiation emissions coming from the Fukushima Daiichi nuclear power plant after the devastating March 2011 earthquake and tsunami in Japan. According to a study published this week in the journal *Proceedings of the National Academy of Sciences (PNAS)*<sup>1</sup>, bluefin tuna caught near San Diego after swimming through contaminated waters off the coast of Japan were tainted with elevated levels of radioactive cesium-134. While the amount of radiation detected in the California fish did not exceed legal health risk limits imposed by the U.S. Food and Drug Administration (FDA), given the long half life of some radioactive isotopes it does raise questions regarding the government's long term efforts in monitoring both seafood imported from Japan as well as those caught from Pacific waters. Furthermore, the findings of this study indicate that some seafood species can rapidly transport radionuclides from a point source in Japan to distant regions, potentially having impacts not only on that particular migratory species, but on the entire food web, including humans, that rely on that species as a food source.

The massive earthquake and tsunami of March 2011, caused extensive damage in Northeastern Japan, including melt-downs at several nuclear reactors, resulting in what some have called the biggest manmade release of radioactive material into the oceans. High levels of radioactive iodine-131 (with a half-life of about 8 days), cesium-137 (with a half-life of about 30 years), and cesium-134 (with a half-life of about 2 years) were measured in seawater adjacent to the Fukushima nuclear plants after the March 2011 events. Immediately concerns arose about the impacts this radiation would have on the U.S. marine environment and resources. As a result, the FDA, in conjunction with U.S. Customs and Border Protection, set up import alerts that flagged

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<sup>1</sup> Madigan, Baumann, and Fisher; *Pacific bluefin tuna transport Fukushima-derived radionuclides from Japan to California*. PNAS: May 29, 2012, doi: 10.1073/pnas.1204859109.

all food shipments from Japan for review. At the time, damage of many of the northeastern Japan export ports made exportation of goods to the U.S. logistically difficult.

As a part of the U.S response to this disaster, the Environmental Protection Agency (EPA) increased the number and frequency of collections from rainfall monitors used to detect radioactivity. In the weeks after these events, monitors in California, Idaho, and Minnesota detected trace amounts of radioactive iodine, cesium and tellurium, consistent with the Japanese nuclear incident. The levels detected were below levels of concern, but how precipitation of radioactive elements from the atmosphere may have affected radiation levels in the marine environment was unknown. One of the biggest concerns from radioactive fallout is the ability of long-lasting radiation to contaminate plants or animals. Fish can swim through pockets of the water column contaminated with radioactive elements, ingesting it through their gills, by taking in seawater or by eating other organisms or plants that have already been contaminated with the radioactivity. As evidenced by the recent PNAS study, certain migratory fish, after being contaminated in the coastal waters of Japan, may transverse the Pacific Ocean posing a health risk for humans and other species of fish that rely on these migratory species as a source of food.

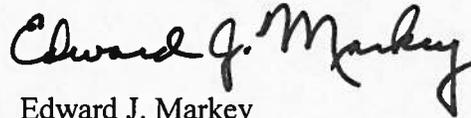
Since the Fukushima disaster, scientists across the United States and Japanese federal governments have been working diligently to understand the environmental and human health implications of this catastrophe. To better understand the FDA's progress and plans in ensuring seafood safety and protecting public health, I ask for your response to the following questions:

1. Has the FDA conducted any long term impact studies on seafood harvested from the Pacific Ocean and the potential impact on public health? If so, what did the agency find? If not, does the agency have plans to develop a long-term comprehensive monitoring program?
2. Did the agency investigate the reports of contaminated bluefin tuna and other species harvested off the coast of California? If so, what did the agency find? Please provide a listing of all instances of species found to have elevated levels of radioactive isotopes since the Fukushima disaster, with specific information regarding the identity of the species, and the extent of the radioactive contamination that was measured. If not, why not?
3. Now that the immediate Fukushima disaster is over, what is the agency's role in proactively studying seafood safety from Japanese imports and seafood caught from the Pacific Ocean and determining whether caught seafood remains safe for human consumption?
4. While the levels of radiation reported in the PNAS study are low, given the fact that some of these radionuclides are shown to bioaccumulate in organisms including humans, has the FDA issued any guidance or warnings to recreational anglers that catch fish and other seafood off the U.S. western coast for individual consumption? If not, will the FDA do so in the future? Please explain.

5. What interaction does FDA have with other federal agencies to ensure the safety of seafood harvested from the Pacific Ocean in U.S. coastal waters?

Thank you for your assistance and cooperation in this matter. I request that you provide a full and complete response within 15 working days or no later than June 22, 2012. Should you have any questions about this request, please have your staff contact Dr. Avenel Joseph of my staff at (202) 225-2836.

Sincerely,

A handwritten signature in black ink that reads "Edward J. Markey". The signature is written in a cursive style with a large, stylized "M" at the end.

Edward J. Markey