EDWARD J. MARKEY OF MASSACHUSETTS
RANKING DEMOCRATIC MEMBER

U.S. House of Representatives
Committee on Natural Resources
Washington, DC 20515

June 1, 2012

The Honorable Jane Lubchenco
Under Secretary for Oceans and Atmosphere, and
Administrator, National Oceanographic and Atmospheric Administration
U.S. Department of Commerce
1401 Constitution Avenue, N.W.,
Washington, DC 20230

Dear Dr. Lubchenco,

I write to request information related to the impacts on migratory fish species of radiation emissions from the Fukushima Daiichi nuclear power plant after the devastating March 2011 earthquake and tsunami in Japan, as well as information related to the impact of marine debris associated with that disaster washing up on U.S. shores.

According to a study published this week in the journal *Proceedings of the National Academy of Sciences* (PNAS), 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 impact of radiation from this event on fish stocks that migrate across the Pacific, as well as about the safety of seafood imported from Japan. Furthermore, the findings of this study indicate that some fish 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 relies on that species for food.

The March 2011 earthquake and tsunami 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 arouse about the impacts this radiation would have on the U.S. marine environment and resources. Fish can swim through pockets of the water column contaminated with radioactive elements, ingesting them through their gills by taking in seawater, or by eating other organisms that have already been contaminated. 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.

In addition to contaminated fish, something else has been moving toward our West Coast from Japan. Over the last several weeks, numerous media outlets have reported that marine debris created by the Japanese earthquake and tsunami has started washing up on U.S. shorelines from Alaska to California. Ocean current patterns in the Pacific make it likely that this will continue happening for some time, and it

is likely that some of the debris will include toxic and hazardous materials. Clearly, the states are not equipped to deal with this eventuality, and a Federal response will be necessary.

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 NOAA's progress and plans for monitoring the effects of radiation and marine debris, I ask for your response to the following questions:

1. Has NOAA undertaken any long term impact studies on fish stocks in, or seafood harvested from, the Pacific Ocean and the potential impacts on fisheries or 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 NOAA 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 by commercial and recreational fishermen, and determining whether caught seafood remains safe for human consumption?

4. Does NOAA have plans to monitor and assess the effect of radiation on marine food webs in the Pacific? If not, why not?

5. What capacity does NOAA have to deal with the marine debris heading toward our Pacific coast? Has NOAA made any efforts to monitor or mitigate the effects of this debris on US waters or shorelines? If not, why not?

6. What interaction does NOAA have with other federal agencies to address both the marine debris and fish contamination issues? Would a coordinating framework such as that envisioned in the President's National Ocean Policy be helpful in addressing these issues?

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 Matt Strickler on the House Natural Resources Committee Democratic staff at (202) 225-6065.

Sincerely,

Edward J. Markey

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