



HEALTH PHYSICS SOCIETY

Specialists in Radiation Safety

August 19, 2014

Dear [REDACTED]:

Thank you for your inquiry to the Health Physics Society (HPS) regarding the radiological consequences flowing from damage to the Fukushima Daiichi Nuclear Power Station following the March 11, 2011 Great East Japan Earthquake and subsequent tsunami. HPS leadership followed the events closely, provided experts in relevant specialties to respond to media requests for information, and sponsored a news event at the National Press Club in March 2012 addressing the events and potential risks from radioactive releases. Presentations and video footage from that event are available at <http://hps.org/media/>. Also, HPS has a number of questions and answers relating to the radiological impact of the Fukushima Daiichi releases at our "Ask the Experts" site (<http://hps.org/publicinformation/ate/>). Simply type "Fukushima" in the Search box, and the relevant questions and answers will be displayed.

As to your specific question regarding an assessment of the exposures and health risks to U.S. citizens, many nationally and internationally recognized organizations¹ have undertaken such evaluations over the past 3 years, and to date HPS has not identified any information to indicate a threat to public health in the United States, or elsewhere in the world (with the exception of those areas identified by the Japanese authorities within their own country). In addition, there are a number of scholarly papers on the topic, which also indicate the concentration of contaminants and potential doses to humans do not pose a detectable threat to public health, and do not substantially contribute to the naturally-occurring and pre-March 2011 fallout concentrations already in the oceans.²

You may also be interested in reviewing the data available from the Oregon Public Health Division of the Oregon Health Authority (<https://public.health.oregon.gov/Preparedness/Pages/04-2012JapanDebris.aspx>). Their activities include air, water and sand monitoring along the Oregon

¹ See, e.g., "Health risk assessment from the nuclear accident after the 2011 Great East Japan Earthquake and Tsunami," World Health Organization (2013); and, Sources, Effects and Risks of Ionizing Radiation, UNSCEAR 2013 Report, Volume I, Scientific Annex A: "Levels and effects of radiation exposure due to the nuclear accident after the 2011 great east-Japan earthquake and tsunami," United Nations Scientific Committee on the Effects of Atomic Radiation (2014).

² See, e.g., "Evaluation of radiation doses and associated risk from the Fukushima nuclear accident to marine biota and human consumers of seafood," Fisher, NS, Proceedings of the National Academy of Sciences of the United States of America, 110(26): 10670-10675 (June 25, 2013); "Fukushima-derived radionuclides in the ocean and biota off Japan," Buesseler, KO, Proceedings of the National Academy of Sciences of the United States of America, vol. 109, no. 16. pp. 5984-5988, (2012); and, "Distribution of oceanic ¹³⁷Cs from the Fukushima Dai-ichi Nuclear Power Plant simulated numerically by a regional ocean model," Tsumune, D, Journal of Environmental Radioactivity, Vol. 111, pp. 100-108 (September 2012).

August 19, 2014

Page 2 of 2

coast, and the site provides other useful references as well. The California Department of Public Health also has published monitoring results, which are available at <http://www.cdph.ca.gov/pubsforms/Pubs/FukushimaEnvironmentalMonitoring.pdf>.

In conclusion, the HPS has not identified any credible information that indicates a public health threat to U.S. citizens from the releases at the Fukushima Daiichi Nuclear Power Station. We plan to continue to follow the scientific literature related to those releases. I hope you find our resources useful, and thank you again for your inquiry.

Sincerely,

A handwritten signature in blue ink that reads "Barbara L. Hamrick". The signature is written in a cursive style with a large, stylized initial 'B'.

Barbara L. Hamrick, CHP, JD, President
Health Physics Society
bhamrick@uci.edu