

October 10, 2012

## **Japan Tsunami Marine Debris and Shoreline Surveys for Radiation**

Hawaii's coastline and beaches have experienced sporadic increases in marine debris, some resulting from the March 11, 2011 tsunami that devastated Japan. The consensus among Federal and State radiation experts is that finding radioactive debris is very unlikely for a number of reasons:

- The tsunami created debris from a large stretch of Japan's coast, but the leak from the damaged Fukushima reactor occurred in one place. Most of the debris was washed many miles out to sea before the release of radioactive materials from the power plant.
- Because of its extended exposure to the elements, it is highly unlikely that it would be contaminated.
- Various state and federal entities have been monitoring marine debris and have not found any radiation levels above normal background.

The Hawaii Department of Health (HDOH) has been conducting quarterly shoreline surveillance since April 2011 (shortly after the Japan tsunami). Due to the recent arrival and confirmation of Japan tsunami marine debris (JTMD) in Hawaii, the HDOH has decided to increase the monitoring frequency to a monthly basis. Results of the surveys performed in February, May, and August/September 2012 were consistent with normal background levels.

Additionally, the HDOH has partnered with the National Oceanic and Atmospheric Administration (NOAA) for shoreline and debris monitoring on the Northwestern Hawaiian Islands (NWHI). Radiation training and detection equipment were provided to NOAA staff members and contractors in April 2012, and surveys were performed in June/July 2012. Marine debris was collected from waters and shorelines around northern most islands and atolls: Kure Atoll, Midway Atoll, Pearl and Hermes Atoll, Lisianski Island and Laysan Island. Scientists monitored marine debris for radiation out of abundance of caution and to gather baseline data from the NWHI. No radiation levels above background were detected.

## **Confirmed Japan Tsunami Marine Debris Monitoring**

On September 18, 2012, a large blue plastic storage bin was found floating in the ocean off Waimanalo, O'ahu. The bin is the first confirmed piece of Japan tsunami marine debris (JTMD) to arrive in Hawai'i. Confirmation was provided by the Department of Land and Natural Resources (DLNR), NOAA, and the Japanese Consulate and Government. The HDOH was asked to scan the bin for possible radioactive contaminants. All readings were within normal background radiation levels.



On September 29, 2012, The *Zephyr*, a longline fishing vessel, discovered a 20-by-6-foot skiff approximately 700 nautical miles northeast of Maui and reported it to the U.S. Coast Guard. The skiff was brought in to Honolulu Harbor on October 5, 2012 where it was examined by NOAA, DLNR and DOH staff. No radiation levels above background were detected.

Even though the likelihood of finding radioactive contamination on marine debris is low, the HDOH will continue to work with federal and local agencies to monitor and test suspect materials as requested. The public may contact DLNR at (808) 587-0400 to report findings of potential tsunami marine debris. If possible, they request that a picture of the debris with a detailed description of the object, date found, location and finder's contact information, be sent to [dlnr@hawaii.gov](mailto:dlnr@hawaii.gov). This information will help DLNR staff to determine if a more thorough investigation is necessary. Reports may also be made to NOAA at [DisasterDebris@noaa.gov](mailto:DisasterDebris@noaa.gov)

### **Air, Local Milk, Precipitation, and Drinking Water Sampling Continues**

Air, milk, precipitation, and drinking water samples continue to be collected following routine sampling protocols. Air samples are collected twice weekly. Precipitation samples are collected monthly, if there is enough rain. Milk and drinking water samples are collected on a quarterly basis. All samples are sent to the Environmental Protection Agency (EPA) laboratory for analysis. Data can be found at the following EPA website:

[http://iaspub.epa.gov/enviro/erams\\_query\\_v2.simple\\_query](http://iaspub.epa.gov/enviro/erams_query_v2.simple_query)