



Japan Advisory – Ocean Contamination

There have been no detections of radioactive materials from the Fukushima Dai-ichi nuclear power plant in Australian waters.

How much radiation was released to the ocean?

Large amounts of radioactive material from the Fukushima Dai-ichi nuclear power plant were released to the ocean in the month following the accident.

There have also been a number of deliberate releases and accidental leaks of contaminated water to the ocean, however these involve much smaller amounts of radioactive material.

Radioactive material has also entered the ocean as a result of fallout and run-off from contaminated land.

Results of ongoing monitoring are available on the Ministry of Education, Culture, Sports, Science and Technology (MEXT) website (<http://www.mext.go.jp/english/incident/1303962.htm>). These indicate that radionuclides in seawater have been diluted and dispersed since 2011 peaks to levels that are generally below MEXT limits of detection in seawater at 30 km off shore.

Is radiation still leaking into the oceans?

Contaminated water continues to reach the ocean from run-off and ground water.

Is this radiation in the ocean a risk to human health?

The radiation levels in the ocean have been shown to be at levels that will not impact human health or be of risk to marine life.

Will radiation from Japan reach Australian waters?

It has been estimated that it will take about 5 years (from March 2011) for radioactive materials released to the ocean at Fukushima to reach the north coast of Western Australia, and about 10 to 15 years to reach the east coast of Queensland. By the time it arrives in Australian waters it is expected that the radioactive



Locally sourced shellfish undergoing preparation prior to analysis

material will have been diluted to such low levels that they will be difficult to detect.

What is ARPANSA doing to protect Australians?

In order to ensure the safety of the Australian public, various programs for fish and seawater monitoring are being undertaken by ARPANSA in order to detect any changes in radioactivity over time. This includes a limited fish testing program to sample fish caught in the waters off the coast of Northern Territory, Queensland and Western Australia. These areas have been targeted because any radionuclide contamination that may reach Australia is expected to reach the northern parts of the country first. See ARPANSA's Technical Report No. 172 (<http://www.arpansa.gov.au/Publications/TechnicalReports/index.cfm#tr172>) for results of the fish testing. None of the fish tested so far have been found to contain radionuclide contamination attributed to the accident at Fukushima.

Australia is also participating in the International Atomic Energy Agency (IAEA) 'Marine benchmark study on the possible impact of the Fukushima radioactive releases in the Asia-Pacific Region'. This will include the establishment of a regional database of radionuclide contamination of the marine environment in waters of the Asia-Pacific Region.